

Supplementary Guidance: The Repair and Replacement of Windows and Doors

1. Status of Supplementary Guidance

This Supplementary Guidance (SG) forms part of the Development Plan and is a material consideration in the determination of planning applications.

The SG expands upon the following Aberdeen Local Development Plan policies:

- Policy D1 – Quality Placemaking and Design
- Policy D4 – Historic Environment

2. Introduction to Topic

The repair and replacement of windows and doors is a prevalent topic. Historic and original features add to the overall pleasant experience of buildings and their wider surroundings. Inappropriate design, proportions or materials can detract from a building and the wider streetscape and setting.

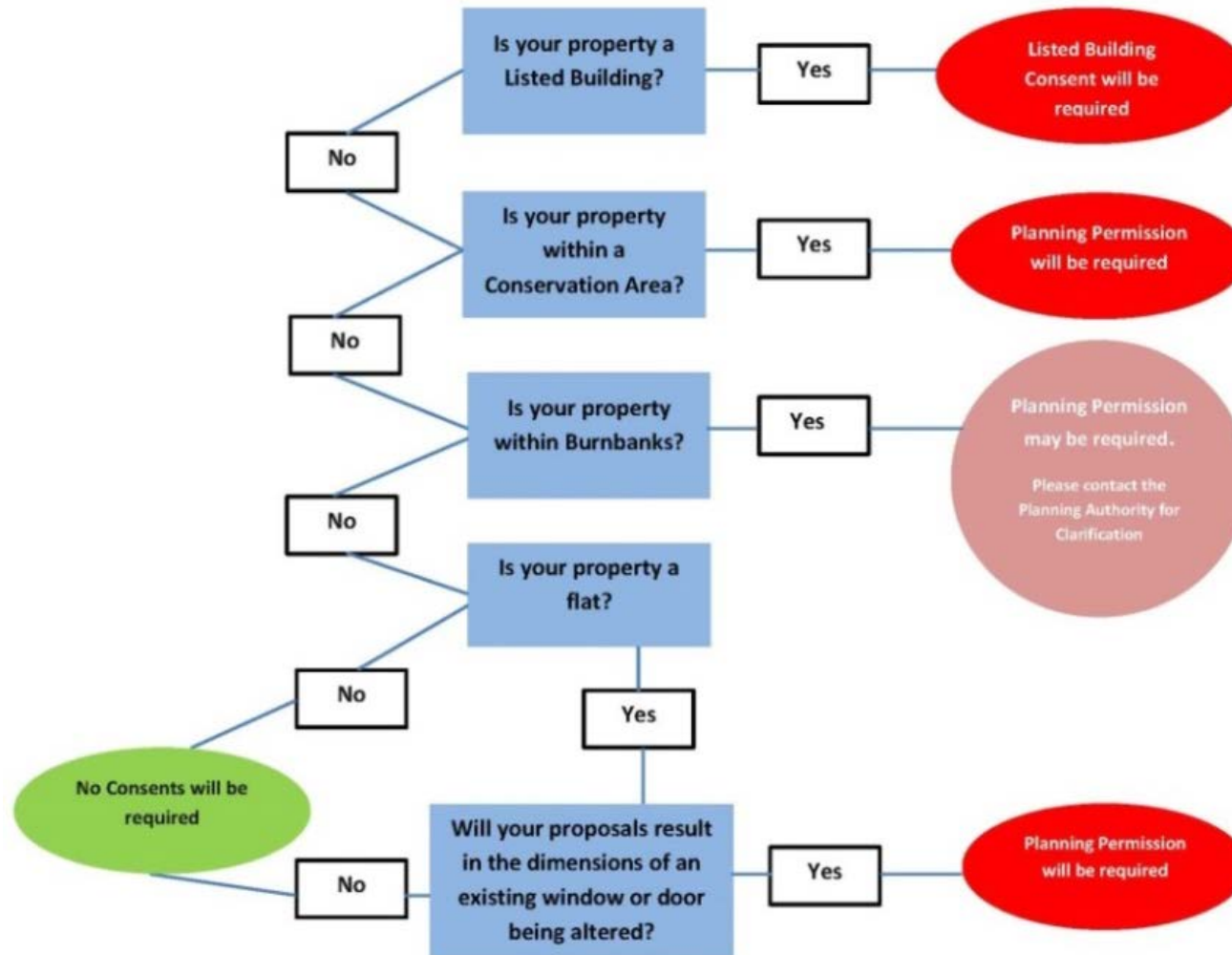
This Supplementary Guidance acknowledges a principle of retaining and repairing historic materials, with replacement requiring thorough consideration.

The SG outlines guidance for listed buildings and public elevations of unlisted buildings within conservation areas.

Specific guidance for non-public elevations of unlisted buildings within conservation areas is outlined where required. The document should be used as a best practice guide for all windows and doors.

Further guidance can be found in the Council's Technical Advise Note TAN: Traditional Building Care, and Aberdeen City Council's Conservation Area Character Appraisal and Management Plan.

The diagram on the next page gives an indication if planning permission and/or listed building consent is required. Any queries should be directed to the Council's Development Management Section.



3. General Guidance

3.1 Repair and Retain

The first principle is one of retention and repair. Original and historic windows and doors will be repaired and restored and this will always be promoted over replacement. No Listed Building Consent or Planning Permission will be required for like-for-like repairs using traditional materials. In most cases, secondary glazing will not require consent but we advocate contacting the planning department to confirm.

3.2 Replace

Replacement of original/historic windows and doors will only be supported where it can be demonstrated to the satisfaction of the Council that they have deteriorated beyond practicable/economic repair. Applications for listed building consent will be required to carry out a detailed window condition survey, please see Appendix 1

3.3 Reinstate

Opportunities to replace unsympathetic windows and doors will be supported. The reinstatement of the original types and arrangements of windows and doors will be encouraged- except where there is a demonstrable benefit in retaining later fenestration as examples of window and glazing technology.

3.4 Local Features

Curved corner windows and rectangular “lying” panes of glass are features which are particularly special to Aberdeen and must always be retained.

3.5 Energy Efficiency

Traditional windows and doors can be upgraded to increase energy efficiency, and improve sound insulation and security, often at a lower cost than replacing units, whilst still retaining the original features and style which gives character to buildings. Historic Environment Scotland’s research and guidance on improving energy efficiency in traditional buildings can be found in their [Technical Conservation knowledge base](#). In particular, [Historic Environment Scotland’s Inform leaflet: Improving Energy Efficiency in Traditional Buildings](#) offers potentially acceptable interventions.

4. Windows

The following chart has been produced for general guidance purposes only. Proposals will still need to demonstrate satisfactory detailed designs and implementation methods. The charts should only be read in the context of the advice provided within the rest of this document. Alterations and works to non-public elevations of unlisted buildings in conservation areas may still require consent, and the principle of retain, repair and refurbish is promoted over replacement in this situation.

Action	Listed Building	Unlisted Buildings in Conservation Area: Public Elevation
Retain, repair and refurbish original/historic window frames and glazing	Consent not required	Consent not required
Secondary glazing	Consent not required in most instances	Consent not required in most instances
Slim profile double glazing in existing frames – with exceptions	Support in principle subject to detail	Consent not required in most instances
Window survey required to remove original/historic window (frames and /or fabric)	✓	N/A
Reinstate original types and arrangements – with exceptions	✓	✓
Timber replica/reinstatement	✓	✓
Retain and reuse historic glass in replacement windows	✓	✓
Reuse historic ironmongery and window fittings in replacements	✓	✓
Use of traditional putty/modern butyl based putty/window beads	✓	✓

Action	Listed Building	Unlisted Buildings in Conservation Area: Public Elevation
Replace original/historic frames with uPVC frames	X	X
New or widening existing openings – with exceptions	X	X
Through Astragals	✓	✓
Plant on / Sandwich Astragals	X	X
Visible Ventilators	X	X
Horns	X	X
Colours – consider uniformity with the street scene/building	✓	✓
Blocking up	See relevant section	See relevant section
Re-opening	See relevant section	See relevant section
Special cases – Industrial/institution/early modern metal/early casement	See relevant section	See relevant section

4.1 Repair, Retain and Refurbish

Original or historic windows must be repaired and retained, and this will always be promoted over replacement.

Original or historic window frames and glazing including stained, decorative leaded, etched and historic glass will be retained. If the glass has to be removed due to damage and is of artistic merit, arrangements should be made for its recording and careful removal.

The thermal performance standard of existing windows can be improved by repair, secondary glazing, draught-stripping and working internal shutters.

4.2 Reinstate

Modern windows which are unsympathetic should be restored to a traditional style which is more appropriate to the age and character of the building.

The reinstatement of the original types and arrangements of windows will be encouraged - except where there is a demonstrable benefit in retaining later fenestration as examples of window and glazing technology. If there is no indication what the original windows were like, then authentic historic precedents can usually often be found on neighbouring properties.

4.3 Secondary Glazing

Secondary glazing design must be discreet, composed of small frames and meeting rails concealed from view. It should be fitted immediately inside existing sashes or at a suitable position within depth of the window reveal, being fixed to the case or the surrounding framework.

Secondary glazing must not compromise architectural internal features, e.g. shutters,

4.4 Removing Original or Historic Windows

Removing original or historic elements will only be supported if it can be demonstrated to the satisfaction of the Council that the historic windows have deteriorated beyond practicable/economic repair.

Applicants will be required to carry out a detailed window condition survey for proposal on listed building.

4.5 Double Glazing

If historic glass or decorative glazing is present, slim profile or standard double glazed units cannot be installed. Where double glazing is acceptable, the weights within the window frame will have to be altered to accommodate the additional weight of the double glazed units – both slim and standard double glazed units. Fixing will be done with traditional putty, modern butyl based putty or wedge shape beads

4.5.1 *Slim Profile Double Glazing in Existing Frames*

Slim profile double glazing must have a maximum width of 14mm from outer frame to outer frame. Planning permission will not be required in unlisted buildings in conservation areas to install a slim profile unit when the check remains as is.

Listed Building Consent is likely to be required if the building is listed. New windows will match the originals as closely as possible. The installation of slim profile units should not alter the original astragal arrangement.

4.5.2 *Standard Double Glazed*

Standard double glazed units will not be permitted in existing frames.

4.5.3 *Opaque/Frosted Glazing*

On public elevations of either listed buildings or unlisted buildings within conservation area the removal of clear glazing for the installation of opaque or frosted glazing will not be permitted.

4.6 Replacement of Original/Historic Windows

Will only be supported where the historic windows have deteriorated to an extent where repair is not possible. A detailed window survey will be required for proposals on listed buildings.

To ensure architectural integrity, replacement windows should replicate the historic design exactly in terms of materials, proportions, profiles and dimensions of frames and glazing bars/ astragals and method of opening and details. Drawings will specify cross sections, plans, relationship at jambs/ sills and details such as mouldings, at a scale of 1:5 at A3.

Replacement windows should re-use historic glass including stained, leaded or etched glass, where this contributes to a building's character.

The installation of standard double glazed units will only be supported where the replacement of the existing windows is considered acceptable. Standard double glazing will usually be considered appropriate in replacement windows in unlisted buildings in conservation areas and may be acceptable in one-over-one windows in listed buildings. In most instances, it will not be possible to use standard double glazed units in multi-paned windows.

On listed buildings and public elevations of conservation areas, the introduction of new PVCu windows as a replacement material is not acceptable.

On non-public elevations within conservation areas, the context and setting of the building is required to be assessed to ensure proposals will have no detrimental impact on the character and appearance of the conservation area. Replacement windows should match the historic proportions, profile and dimension of the original windows and avoid heavy frames, but it may be acceptable to have a different material and/or method of opening.

4.7 Replacement of Original/Historic Windows

If existing non-historic windows on the public elevation of an unlisted building within conservation area are being replaced, the reinstatement of the original types and arrangements of windows will always be encouraged.

The installation of PVCu one over one sash and case windows will be allowed where there are existing approved one over one sash and case PVCu windows, the following criteria must be met:

- no more than 25mm of the outer window frame should be visible at the top and sides, once the window has been fitted into the masonry opening;
- the meeting rails must fully overlap;
- the bottom rail of the lower sash must be at least 75mm high;
- the glass must be recessed from the front face of the sash by at least 10mm;
- on bay windows no more than 25mm of the frame should be visible in the window opening, the remainder being concealed behind the masonry window check. A frame which encroaches more than 25mm will not be acceptable.

On non-traditional, more modern buildings a broader range of materials and designs of windows may be permitted, depending on the individual building and surrounding area.

4.8 New or Widening Existing Openings

Proposals to increase the glazing area by removing stone or timber mullions will not be granted permission/ consent. Proposals to alter existing window openings or install new window openings on principle elevations will not usually be considered acceptable as this can create an unbalanced composition.

New openings must be carefully located to avoid disruption to the characteristics of the surrounding external and internal context. Where the building forms part of a larger grouping, it may be necessary to consider the wider impact.

4.9 Putty and Beads

Where glazing beads are required they should be wedge shaped to match a putty fillet, and taper from 10mm at the glass to less than 2mm at the outside. The edge of the bead must be flush with, or kept slightly back from, the face of the sash. It must never project out from the face of the sash, or

an unacceptable shadow line will be created around each pane of glass.

4.10 Ironmongery

Historic ironmongery should be salvaged, refurbished and re-used where it can be brought back into use. Original window fittings such as cord clamps, sash lifts, sash fasteners and hooks should be retained and reused where possible

4.11 Astragals (Glazing Bars)

Where there is clear photographic or physical evidence that astragals have been removed, their replacement is encouraged, except where their removal demonstrates the evolution of glazing technology / a significant later re-modelling scheme or where the wider impact would be harmful (e.g. a terrace of properties where all the windows have had glazing bars removed and one property owner wishes to reinstate).

It is possible to determine the dimensions of replacement astragals by inspecting the original windows. Should original windows be used as the model, astragals must match the thickness of the original astragals, particularly in multi pane sashes. The width of the astragal will depend on the size of the window, the historic evidence, and proportions.

Astragals must be of timber and carry through the sash to separate completely each pane of glass.

Astragals applied to the surface of the glass (planted astragals) or sandwiched between the glass of double glazed units are not acceptable. Where there is a complete change of window the internal profile of the astragals must match the existing. If there is no historic precedent astragals should be appropriate to the period and detail of the building.

4.12 Ventilators

Where additional controlled ventilation is required it is preferable to provide this by means of hidden vents. Prominent trickle vents or cutting ventilators through glass will not be acceptable. See Historic Environment Scotland's [Short Guide for Homeowners: Sash and Case Windows](#).

4.13 Horns

Horns are not traditional in Aberdeen sash and case windows and as such are not acceptable in new windows, unless there is clear evidence they existed on the original windows. In such instances the design of the horns should match the original.

4.14 Colour

White has been the default colour of window frame repairs and replacements for the past 20 years. In order to encourage uniformity, where there are multiple units in a building new windows will be white. Other colours will need to be agreed.

4.15 Blocking Up

The blocking up, in whole or in part, of original openings will not usually be supported and should only occur where the window makes little contribution to the building or area. The blocking up should be done in materials that relate to the surrounding building and evidence of the opening, such as window surrounds, should be retained.

4.16 Re-opening

The re-opening of blocked windows will be allowed only where this will reinstate the intended elevation treatment of the building.

4.17 Industrial/Institutional Buildings

Industrial and institutional buildings have a variety of window types, depending on their age and function. The original windows should be retained wherever practicable, although flexibility on window design may be acceptable to allow conversion to new uses.

4.18 Early Modern Metal Windows

Early modern metal framed windows should normally be repaired. If this is not possible they should be replaced with matching windows of the same materials and design. New units manufactured from different materials will only be acceptable where exact replication of the original window is of less importance. In such cases, any discrepancy in form, profile, section and opening method should be kept to a minimum.

4.19 Casement Windows

Original casement windows are relatively rare and must be repaired where possible. If repair is not possible, they should be identically replaced.

5. Doors

Traditional external doors and doorways are solid timber frame construction with inset panelling retained by mouldings. Throughout the 18th and 19th centuries panelled doors became standard for the main entrance of most types of building. Most faults with traditional doors can be repaired, which can be less expensive than replacement. Alterations and works to non-public elevations of unlisted buildings in conservation areas may still require consent. The principle of retain, repair and refurbish is promoted over replacement in this situation.

Action	Listed Building	Unlisted Buildings in Conservation Area: Public Elevation
Retain, repair and refurbish original/historic doors, doorframes and door glazing	Consent not required	Consent not required
Door survey required to remove original/historic door (frames and/or fabric)	✓	N/A
Reinstate original types and arrangements	✓	✓
Replace to match original/historic	✓	✓
Replace with timber with the correct detailing	✓	✓
Replace with composite door	X	See relevant section
Replace with uPVC, aluminium	X	X
Reuse historic ironmongery	✓	✓
New ironmongery appropriate to the building period	✓	✓
Colour – heritage tones	✓	✓
Stains and varnishes	X	X
Blocking up redundant doors	X	X
New openings	See relevant section	See relevant section

5.1 Repair, Retain and Refurbish

Original or historic doors and doorways, including sidelights or fanlights, must be repaired and retained, and this will always be promoted over replacement. The thermal performance standard of existing doors can be improved by repair and draught-stripping.

5.2 Reinstate

Modern doors, doorways and ironmongery which is unsympathetic should be restored to a traditional style which is more appropriate to the age and character of the building where possible. The reinstatement of the original types and arrangements of doors and doorways will be encouraged. If there is no indication what the doors and doorways were like, then authentic historic precedents can often be found on neighbouring properties.

5.3 Removing Original or Historic Doors, Doorframes and Doorglazing

This will only be supported if it can be demonstrated to the satisfaction of the Council that the historic doors have deteriorated beyond practicable/economic repair. Applicants will be required to carry out a detailed door condition survey for proposals on listed buildings.

5.4 Replacement

On listed buildings and public elevations in conservation areas, any new door should match the original in terms of proportion, profile and material, and reuse historic glass where this contributes to a building's character. If the property forms part of a group of uniform design, then any replacement should make reference to those of the neighbouring properties in style, design and size.

On listed building tight grain timber replicas will be required. Composite, aluminium and PVCu doors will never be acceptable. Doors with mouldings applied to resemble panelling or that introduce glazing within the door will not be acceptable.

On public elevations in conservation areas composite door solutions may be appropriate where they would constitute an improvement on the existing design. If the existing door is surrounded with sidelights and fanlights, and/ or mouldings these elements are required to be retained.

If installing a composite door and doorframe would result in the loss of these features the proposal will be refused. PVCu, aluminium and flush plywood doors with mouldings applied to resemble panelling, or replacements that introduce elements of glazing within the door will not be acceptable substitutes.

5.5 Ironmongery

Original door ironmongery such as letterboxes, door knockers and handles should be retained and reused. New fittings should be appropriate to the period of the building.

5.6 Colour

In general, doors should be painted in a dark heritage style colour. Other colours may be acceptable depending on the setting and street scene. Bright glosses and white paint should be avoided. Stained or varnished wood finishes will not generally be accepted on public elevations.

5.7 Blocking Up

Doors in street frontages, even though no longer used, should always be retained in situ rather than being blocked up.

5.8 Alteration of Existing and Formation of New Openings

The original proportions of doorways and door openings on street frontages must always be retained, and proposals to recess a door either less or more deeply within the door opening will not be supported.

New doorways should only be considered where they can be incorporated into the existing architecture and designed and detailed in a way that is compatible with the existing historic fabric. Great care should be taken to retain existing design patterns, symmetrical elevation or architectural details.

Appendix 1: Window and Door Condition Survey

What should be in a survey?

It is recommended that the survey be conducted and completed by someone who is knowledgeable in the field of architectural conservation or building conservation e.g. joiner.

The survey should include:

- each individual window/door;
- elevation drawings with the windows/doors numbered;
- an accompanying proportionate amount of information about the type, age and condition of each window/door;
- photographs of each window/door to highlight areas of deterioration; and
- a completed survey form.

Additional information may be required for a more complex building or where significant historic windows/doors are involved.

For a straightforward residential property an annotated photo with the windows/doors numbered and a short description of the window condition may be acceptable.

<u>Condition Survey</u>		
Property Address:		
Window/Door Ref:		Window/Door Location:
Dimensions:	Sketch:	Condition:
Type:		Glass:
Frame Type:		Cill:
Glazing Type:		Frame:
Ironmongery:		Astragals:
Features/Notes:		Stops:
		Draught Strip:
		Sash Cord/Chain:
		Open: