

Dumfries and Galloway Council

LOCAL DEVELOPMENT PLAN 2

Windows and doors in Listed Buildings and Conservation Areas

Planning Guidance - January 2020





WINDOWS AND DOORS IN LISTED BUILDINGS AND CONSERVATION AREAS

INTRODUCTION

1. In Dumfries and Galloway there are approximately 3400 buildings or structures of architectural or historic interest in Historic Environment Scotland's statutory list and 36 Conservation Areas, designated since 1970 as areas of special architectural or historic character where planning proposals should preserve or enhance that character.
2. The first duty of care for any Listed Buildings or buildings within a Conservation Area lies with the owner. Planning Permission is needed to replace windows and doors in Conservation Areas. Listed Building Consent is needed to alter or replace windows or doors in Listed Buildings. In some cases, both kinds of permission will be required.

Summary of what permission is needed:

Repairs to historic windows and doors using the original materials to match the historic design do not require either Planning Permission or Listed Building Consent.

Painting of windows and doors in a new colour requires Listed Building Consent or Planning Permission in a Conservation Area

Installation of double glazing in windows in Listed Buildings requires Listed Building Consent.

Replacement of a window or door in a Listed Building will require Listed Building Consent. Planning Permission will also be required in some buildings.

Replacement of a window or door in an unlisted building within a conservation area requires Planning Permission.

PURPOSE OF GUIDANCE AND POLICY BACKGROUND

3. Dumfries and Galloway Council must consider the impact of planning proposals on historic character and significance of both Listed Buildings and buildings within Conservation Areas. The Council supports proposals that preserve or enhance the character of Conservation Areas and the historic fabric and character of Listed Buildings. Dumfries and Galloway Council's Local Development Plan 2 supports good design which preserves and enhances the region's heritage through its policies and supplementary and planning guidance.

Local Development Plan 2

Policy OP1: Development Considerations

- b) Historic Environment; and**
- f) Sustainability**

Policy OP2: Design Quality and Placemaking;

- HE1: Listed Buildings**
- HE2: Conservation Areas**

Supplementary Guidance and Planning Guidance:

- Historic Built Environment**
- Design Quality and Placemaking**
- Conversion of Traditional Buildings**
- Conservation Area Character Appraisals & Management Plans**

MATTERS TO CONSIDER WHEN DEVELOPING PROPOSALS

4. Windows and doors are often one of the most noticeable parts of a building, particularly on a front or principal elevation. They make a very important contribution to the character of most historic buildings and places. The materials and method of manufacture are often indicative of the building's age and the appearance and details make a very significant contribution to the architecture or vernacular design of an individual building or group. Replacing original windows can harm the overall character and appearance, architectural design and therefore the historic significance of the building or group.
5. Owners and agents are expected to consider the wider context of the building and identify in what way the windows and doors contribute to character. A condition survey of each individual window and door should be carried out and submitted alongside a planning or listed building consent application. Where possible, defects should be addressed through maintenance, repair or adaptation. Any significant alterations to, or replacement of, some windows and/or doors in Listed Buildings and Conservation Areas should be based on sound reasoning for those proposals which balances the historic character with other matters.

The assessment form for the condition survey of windows and the details and parts of a sash and case window are found at Appendix 3 of this document. It may be adapted for different window types and for doors. It is also found in the Dumfries and Galloway Council's Supplementary Guidance: Historic Built Environment – pp. 56, 57 & 58
https://www.dumgal.gov.uk/media/19756/LDP2-Draft-Supplementary-Guidance-Historic-Built-Environment/pdf/Draft_Historic_Built_Environment_SG_January_2018.pdf?m=636491958774830000

Technical Details for Windows and Doors - Information required (for planning and listed building consent applications) is attached at Appendix 2 or found at:
<https://www.dumgal.gov.uk/media/22207/Technical-Details-for-Windows-and-Doors-Information-required/pdf/technical-details-for-windows-and-doors-ldp2-nov-2019.pdf?m=637105328431570000>

Following completion of a condition survey, the full range of options available to repair and upgrade existing windows and doors will become clear. Replacement should be the last option.

6. It is important to understand the significance of the features of the building. Information relating to the assessment of condition and significance of historic windows and doors and ways of improving their condition and function follows at Appendix 1.

WHEN REPLACEMENT IS JUSTIFIED

7. If more than half of the fabric of an individual window or door would be lost during repairs it is considered as being 'beyond practical repair' then a case may be made for replacement by replication. The exact requirements for the design of the replacement windows and doors will depend on the heritage status of the building:
 - Historic, single glazing and/or historic glass should be replicated in a number of windows

- Sizes of windows in the same building vary, so accurate replication requires each section, astragal, other moulding and individual parts of each window/door to be measured and recorded for use as the basis for manufacture of replica windows and doors where appropriate
 - Opening mechanisms should be included in drawings and show where whole box cases will be replaced if required
 - Trickle ventilation should be discreet and not visible, designed in alternative ways into the window or frame.
 - Timber shutters should remain in operational order or be brought back into working order. Adding discreet draft exclusion measures to shutters will be encouraged.
8. Where it is proposed to replace one or more window which is clearly not the original historic design, new windows which closely reflect the original historic design will be supported where there will be no detriment to historic fabric (for example shutters, mouldings or natural ventilation).
9. In some buildings, proposals which include historic accuracy in the treatment of windows/doors on the principal elevation but propose some replacement windows in modern materials away from the principal elevations may be acceptable. The replacement windows will be expected to be of an appropriate design, both in format, opening mechanism and detail. The test will be the degree to which the overall historic significance and character of the building or group will be preserved or enhanced. Proposals which reinstate the original historic design of a door but not all of the windows may also be acceptable in some cases on the same basis. Both of these combinations should be supported by a design or heritage statement setting out the benefit to the character of the Listed Building or conservation area.
10. Occasionally, some buildings may be in very poor order and at risk of remaining unoccupied because a great deal of restoration work is required for a new use. All of the proposed elements of the restoration scheme, included windows and doors, will be considered together and decisions taken based on the overall benefit to the historic significance and character as set out in a supporting design and heritage statement.

APPLICATION OF WINDOW AND DOOR RETENTION PRINCIPLES TO LISTED BUILDINGS AND UNLISTED BUILDINGS IN CONSERVATION AREAS.

11. The table below sets out the approach that will be taken for proposals to buildings of each heritage category. The required details will depend on the original historic design of the building or group of buildings.

When the condition surveys for each window and door have demonstrated the level of repair or alteration proposed for windows and doors or that they are 'beyond practical repair' the following table summarises the general requirements for repairs and /or replacement windows and/or doors. It sets out how this will normally be applied to buildings of different heritage status. It also sets out the expectations for new windows and doors where there were previously none.

	Category A Listed Building	Category B Listed Building	Category C Listed Building	Unlisted building in Conservation Area	
Y	Y	Y			Design/heritage statement justifying proposed actions
					Materials
Y	Y	Y			Materials for replacement timber windows should match the existing/original <i>softwood</i> or <i>hardwood</i> . Where existing windows are historic steel or other metal, matching metal is required <i>in all windows</i> .
Y	Y	Y			Materials for replacement of existing, historic original timber doors should match the existing/original timber <i>softwood</i> or <i>hardwood on all elevations</i>
N	N	N	Y		Modern composite substitute for replacement of timber doors
N	N	N	Y		uPVC substitute for timber windows
					Alterations subject to detail
Y	Y	Y	Y		Discreet draught proofing of original existing windows and doors
N	Y	Y	Y		Alterations to insulate original existing external doors
N	Y	Y	Y		Alterations to improve fire resistance of original doors and windows
N	N	Y	Y		Replacement sash and case locks
N	Y	Y	Y		Additional door locks

Y	Y	Y	Y	Discreet sash hinge system in sliding sash and case windows
Y	Y	Y	Y	Internal secondary glazing of windows
N	N	Y	Y	Replacement of glazing in existing frames with slim double glazing <i>on principal elevations</i>
Y	Y	Y	Y	Replacement of glazing in existing frames with slim double glazing or thermally efficient single glazing <i>away from principal elevations</i>
N		Y	Y	Insertion of glazing into existing door panels <i>on principal elevations</i>
N	Y	Y	Y	Insertion of opening lights into fixed windows subject to detail
N	Y	Y	Y	Insertion of glazing into existing door panels <i>away from principal elevations</i>
				Replacement windows and doors and windows and doors in new openings subject to details
Y	Y	Y	Y	Replacement windows using original historic materials, ironmongery and opening mechanism, re-using original or replica historic glass and/or decorative panes <i>on principal elevations</i> .
Y	Y			Replacement windows using original historic materials, ironmongery and opening mechanism, re-using original or replica historic glass and/or decorative panes <i>away from principal elevations</i> .
Y	Y	Y		Replacement windows to use historically manufactured matching glass <i>in decorative windows</i>
Y	Y	Y	Y	Replacement doors to replicate original historic format and ironmongery or door furniture <i>on principal elevations</i>
Y	Y	Y	Y	New windows in new openings to replicate historic format, proportions, materials, ironmongery and opening mechanism <i>on principal elevations</i>
Y	Y			New windows in new openings to replicate historic format, proportions, materials, ironmongery and opening mechanism <i>away from principal elevations</i>
Y	Y	Y	Y	Use of appropriate design of conservation style rooflights
Y	Y	Y	Y	New doors in new openings to replicate historic format, proportions, materials and ironmongery/door furniture <i>on principal elevations</i>
Y	Y			New doors in new openings to replicate historic format, proportions, materials and ironmongery/door furniture <i>away from principal elevations</i>
Y	Y			Through astragals to be used in replacement windows and glazed doors (may require use of slim line double glazing or single glazing)

N	N	N		Use of replica section plant-on astragals where required to match appearance and preserve character
N	N	N	N	Glazing bars between within double-glazed sealed unit
Y	Y	Y		Concealed trickle ventilation on all replacement windows
Y	Y	Y	Y	Linseed or other traditional putty line to be used for fixing window and door glazing
N	N	N		Glazing fixed with external beading <i>away from principal elevations</i>
Y	Y	Y		Opening mechanism to match original historic windows (sash and case or casement) on all elevations
N	N	Y	Y	Hinged replica sash and case matching in other details

COMPARING TRADITIONAL WITH NEW WINDOWS AND DOORS

There are a great many different types of windows and doors both traditional and modern. Some of the replacements available may be acceptable when replacement has been shown to be necessary. This will depend on the heritage status of the building: ie. whether it is Listed or unlisted in a Conservation Area, as set out in the table above.

Windows:



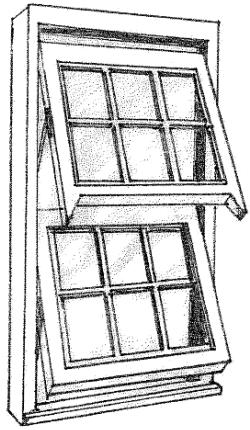
1st photo above shows a good double glazed, timber, replacement, 6 over 6 pane sliding sash and case window, in a conservation area. The horns are discreet but may not have been a necessary part of the design.

2nd photo is a vernacular (traditional) terrace with two original, 2 over 2 pane windows.

3rd photo of a replacement, uPVC window in the same terrace where the design is not quite as it would have been by omitting the 'fancy' horns; however the proportions are reasonably appropriate.

4th photo is a uPVC window with a generally acceptable appearance. However, compared with traditional timber windows, the left and right stiles are a little too wide and the meeting rails are a little undersized.

5th photo shows a uPVC replacement window which is poorly proportioned and has hinged sashes where the meeting rails do not fall one behind the other so there is no traditional overhang of the upper sash over the lower sash, the meeting rails and the stiles are too wide.



From left to right: Modern hinged sashes which tilt open have a poor appearance as a result of their opening mechanism, the storm-proof style meeting rails and inappropriate use of horns.

New and refurbished windows can include a proprietary sash hinge system to allow the sashes to swing in for cleaning, maintenance and even escape purposes but have a traditional sliding sash opening mechanism for general use.

2 examples of well proportioned, modern, sliding sash and case window with traditional details and meeting rails which may be acceptable in some buildings.

Triple glazing in a sliding sash and case window with a 1 over 1 pane format which may be acceptable in some buildings.

Doors

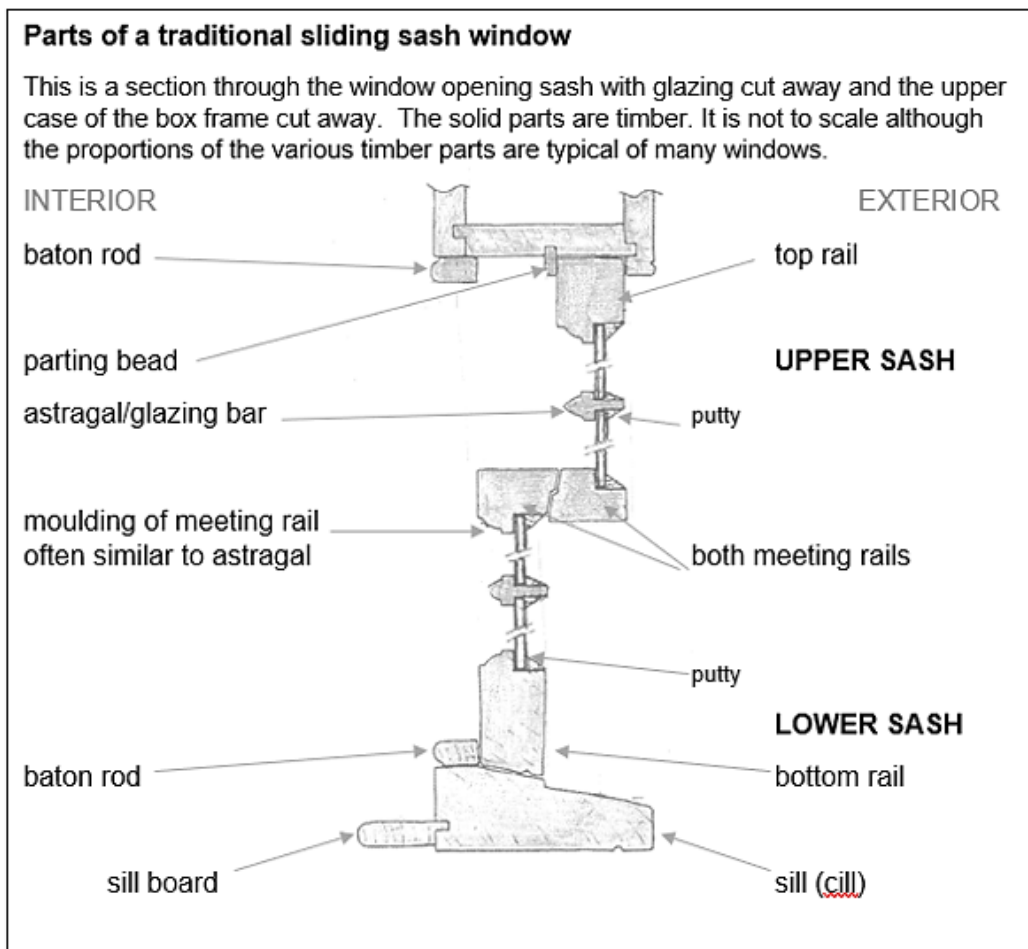


*Left. A sensitively adapted door with glazing inserted into top fielded panels.
Right. A fully glazed, uPVC door which is out of character with the original building as a result of the proportions of the panels and side rails.*

APPENDIX 1.

ADDITIONAL INFORMATION FOR OWNERS AND APPLICANTS

- A. Owners or their agents need an independent expert view on the condition of existing windows and doors to determine whether maintenance, refurbishment, repair or upgrade is required for each window and each door in the building. The condition survey should be carried by a joiner or equivalent with the appropriate skills. Applications to replace windows or doors should include sufficient supporting information, including the condition survey, to demonstrate that each window and door has been properly assessed and setting out the options that have been considered, and why the proposal is most appropriate.
- B. Not all historic windows in the region are timber but many are timber sliding sash and case. The condition survey should be based on the form found in Dumfries and Galloway Council's Supplementary Guidance: Historic Built Environment and in the Historic Environment Scotland publication *Sash & Case Windows. A Short Guide for Home Owners*. [link below]
<https://www.engineshed.scot/publications/publication/?publicationId=9ea41caf-aa32-4827-ba08-a59100fea1a3>



Sketch of a simple weighted sliding sash and case window.

The format is 2 panes over 2 - typical of the 19th or early 20th century.

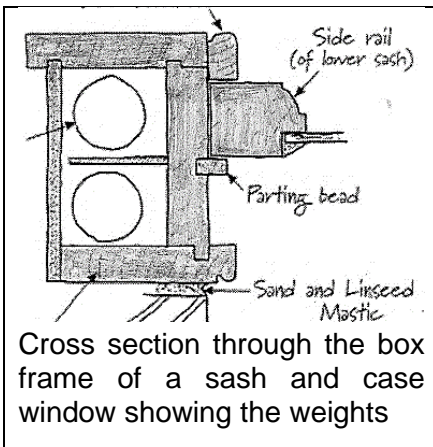
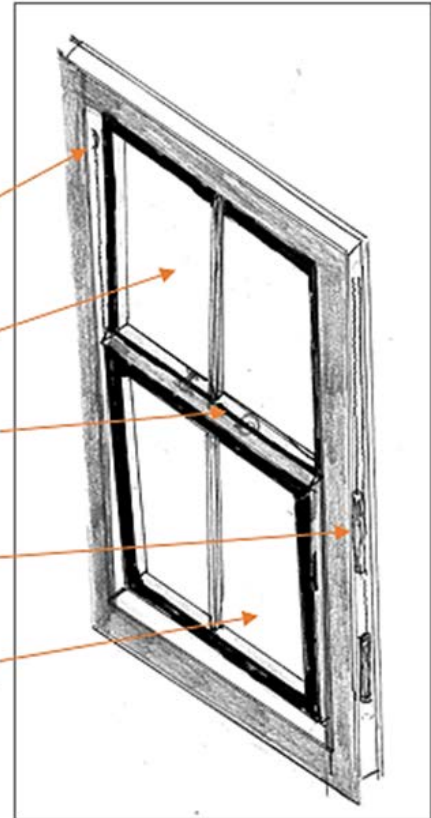
Pulley – the sash cord runs from the weight, up the box frame and out over the pulley and down to be attached to the stile [side piece] of the window. The stile has a groove cut into it for the sash cord

Upper sash - with 2 panes of glass separated by a central astragal

Meeting rails – one directly behind the other. This is where the window catches and latches are attached.

Box frame – this is where the sash cord and sash weights for each sliding sash of the window are found. The 2 weights usually hang separately kept apart by a thin piece of timber inside the box frame

Lower sash – with 2 panes separated by a moulded glazing bar called an astragal.

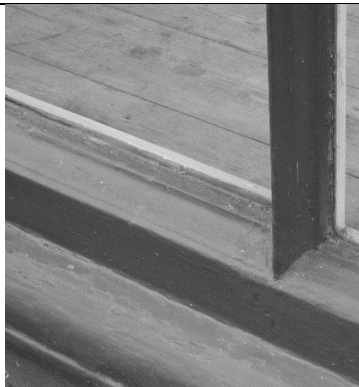


Above are 18th and early 19th sections of glazing bars close to Georgian 'astragal' and 'hollow' styles

Below are 19th century 'Gothic' and 'lamb's tongue' profile glazing bars



4 over 4 pane sliding sash and case windows



Detail of where the astragal meets the moulding of the bottom rail

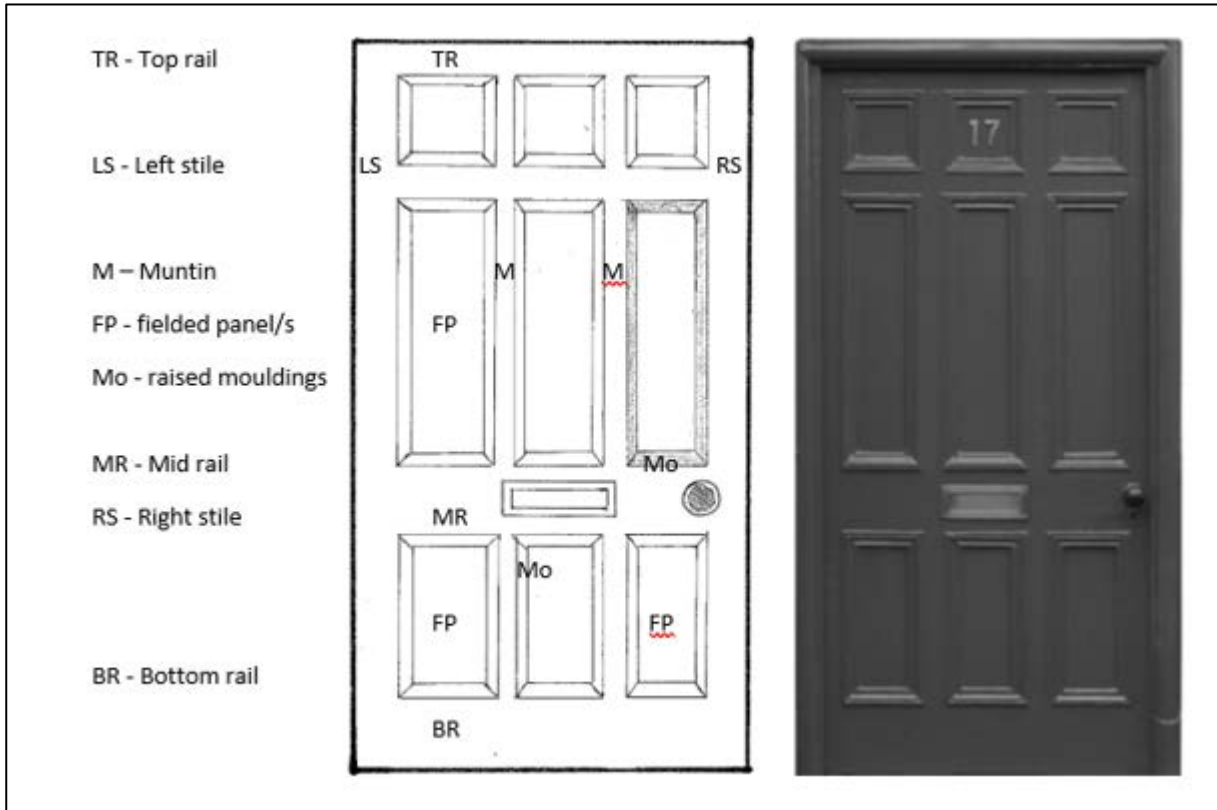


6 over 6 pane sliding sash and case window with operational shutters



1 over 1 pane sliding sash and case windows

Parts of a traditional timber door



- C. Doors also come in a variety of formats. Historic Environment Scotland's Inform Guide: External Timber Doors provides information on general repairs to historic timber doors which may be adapted to doors with particular features or special character.
<https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=868ab7cf-176f-4f85-b925-a59500e4b21b>

DETERMINING HISTORIC AND ARCHITECTURAL INTEREST.



- D. Windows and doors, their format, appearance and materials make a significant contribution to the architecture or local vernacular design of buildings. Where detail is regular and repeated in a group, as seen in Dalswinton Conservation Area there is also collective historic and architectural significance. The wider context should always be considered.

E. The majority of historic or architecturally interesting windows and doors in Dumfries and Galloway are made from timber. However, other windows use metal such as individual small panes spaced by 'comes', usually strips of lead separating coloured or textured glass forming a pattern or picture. Camework windows may be framed in iron, steel or hardwood and occasionally set directly into stone surrounds or above or within doors. The most recognisable camework windows are in churches but are also found in civic buildings, schools and dwellings. The historic significance of this type of window may be in the artistry and craftsmanship but may also be linked to people and events of local or national significance. Camework is an important part of the character of the building or place in terms of historic fabric and appearance.

CLIMATE CHANGE AND ENERGY EFFICIENCY

- F. Buildings may be adapted to reduce heat loss through the exterior envelope to reduce the heating fuel required. Heat is lost from the roof, walls, windows and doors in different proportions and it is sensible to look at the thermal performance of the whole building. Some options for sensitive improvements are included in
- ~ Dumfries and Galloway Council's Supplementary Guidance: Historic Built Environment;
<https://www.dumgal.gov.uk/article/17034/LDP2-draft-supplementary-guidance>
 - ~ Historic Environment Scotland's Inform Guide: Improving Energy Efficiency in Traditional Buildings; <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=246ff4ae-1483-452a-8fb3-a59500bd05d5>
 - ~ Society for the Preservation of Ancient Buildings advice
<https://www.spab.org.uk/advice/sash-window-maintenance>
- G. Existing windows and doors have 'embodied energy' from their manufacture; softwood used for windows and doors pre-dating WW1 is better quality than most modern timber. Ways of improving thermal performance of windows and doors without losing original fabric or character should be included with repairs and are generally better value than replacement. Small modifications can significantly improve efficiency. Acetylated softwood and locally grown hardwood can be used for sill and other repairs. If the windows and doors function at present but better heat retention or draught reduction would be beneficial, adding secondary glazing is an option. However, there may be occasions when this is difficult if internal features need to be preserved.
- H. Regular maintenance such as painting, reputtying, replacing sash cords and repairing hinges and catches will ensure that timber windows and doors keep working well. Metal windows need regular painting and to be kept free of rust to prevent the glass from cracking. The following list includes the smallest interventions where there would be least impact on historic character or significance and alterations where there may be much greater impact.

- **Maintenance** – no consents are required and the windows and doors can be put back into good working order using putty, filling small gaps, splicing in damaged timber sections in an appropriate matching timber and painting the same colour.

Examples of parts of a timber sash and case window which require maintenance. They are in operational order but need paint stripping, minor repairs, re-puttying and re-painting. The sash pulleys should be checked to make sure they are running smoothly and sash cords should be checked for wear and that points of attachment to the sash frame and the weights are still secure.



- **Alterations** such as modest interventions to improve draughts and security which are relatively unnoticeable from the point of view of historic fabric. Listed Building Consent may be required depending on the extent of the proposed alteration.
- **Like for like replacement of parts** of a window or door such as a damaged frame where splicing in timber would not be effective. If genuinely like for like no consent would be required. Hardwood sills may be acceptable to replace deteriorated softwood sills. Metal window parts may also be replaced in this way if they cannot be repaired. Both approaches may need skilled trades.
- **Window pane replacement.** The glass in existing panes may be of historic interest. It is possible to re-use historic glass in replacement parts of the window or door if the correct techniques are used. Heritage replacement glass should be sourced when required to replace broken panes in Listed buildings.
- **Door panel replacement with glazing.** In doors with 4 or 6 timber panels where there is insufficient light reaching the interior, replacement of the upper panels with glazing may be an option which would allow the existing door to be retained.
- **Improving thermal efficiency without changing the whole window/door.** The thermal performance of some or all of the windows and doors can be improved by
 - using thermal blinds and curtains inside the building;
 - adding or repairing existing internal shutters inside windows;
 - adding vestibule doors;
 - installing discreet permanent or seasonal secondary glazing where no internal features of interest would be affected;
 - replacing window and door glazing with modern single glazed thermal glass;
 - replacing window and door glazing with slim double glazed units; or
 - a combination of those options.

~ **Replacement of some windows or doors** - The poor condition of one or some windows/doors of a building is not justification for the replacement of all. Opening sashes and casements can be replaced with double glazed sashes or casements which are changes that require Listed Building Consent and/or Planning Permission in a conservation area. This should be the least preferred option and a last resort for buildings where no other way forward is possible unless very carefully detailed. Replacement windows in conversions may need to be adapted for fire escape purposes.

Appendix 2 sets out the level of detail that is required for the application in the document *Technical Details for Windows and Doors – Information required*.

ROOF WINDOWS

- I. In conversions of lofts and farms to habitable or working spaces, additional light through the roof may be required. Farm buildings often have long or grouped of metal framed rooflights some hinged and others fixed close. Many metal framed rooflight windows may be repaired and re-glazed which should be considered before replacement. Otherwise, very similar size and proportion double glazed modern alternatives will be acceptable subject to the status of the building. In some Listed buildings, if it is unnecessary to improve thermal performance, original roof window types should be kept and repaired.



- J. In some cases, new, very modern and contrasting design roof windows may be acceptable providing that the applicant has assessed the impact on historic significance, character and fabric of the building or group.

HERITAGE LED AND HISTORIC BUILDING GRANT WORK

- K. Where grants are sought from funding bodies which support the restoration and reinstatement of historic character and fabric, the materials and design details of windows and doors will be expected to replicate historic detail. Slim double-glazed units may be supported depending on the funding body and the status of the building.
- L. Some parts of the region have benefitted from historic building grants and conservation area regeneration schemes. In these places, to fulfil the conditions and purpose of grants, particular attention should be given to the detail of proposals for windows and doors so that changes do not undermine the investment of public money which benefits the whole area.

Dumfries and Galloway Council
LOCAL DEVELOPMENT PLAN 2

Technical Details for Windows and Doors - Information required

Technical Note - November 2019



www.dumgal.gov.uk

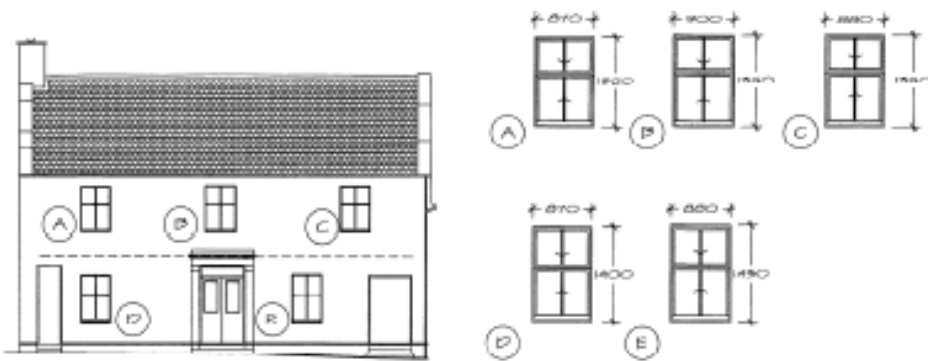
Dumfries
& Galloway 
COUNCIL

Windows are an important visual component of a building. Accordingly, it is essential to convey visually the intended changes, in context and in detail.

Shown below is an illustration of the window details sought by the planning authority when making decisions on applications for development within the conservation area and listed buildings.

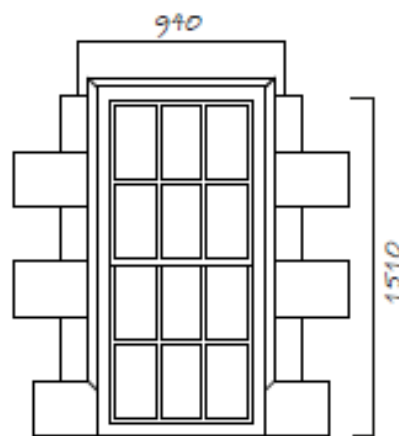
ELEVATIONS

All elevations of the development should be provided to a scale of 1:50 or 1:100 and include the measurements on the drawings. If several replacement windows are proposed, the elevational drawing should be labelled with numbers which can be cross referenced with the specific window details.



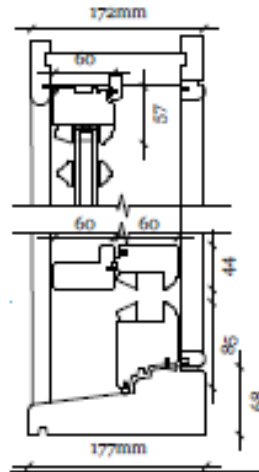
FRONT PROFILES OF EACH WINDOW

Front profiles of each type of window should be provided. Typical window styles will not be acceptable. They should be to a metric scale of 1:10 or 1:20 and the measurements should be written on the drawings.



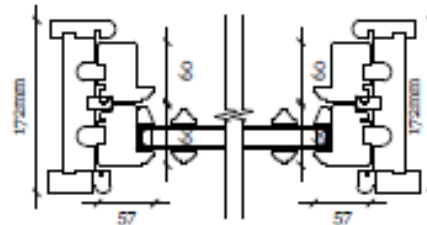
VERTICAL SECTION OF EACH WINDOW

A vertical cross section of each type of window should be provided. Typical window styles will not be acceptable. They should be of a metric scale measuring 1:5 or 1:10 and the measurements should be written on the drawings.



HORIZONTAL SECTION OF EACH WINDOW

A horizontal cross section of each type of window should be provided. Typical window styles will not be acceptable. They should be of a metric scale measuring 1:5 or 1:10 and the measurements should be written on the drawings.



Details of the astragals, trickle vents and method of opening should be detailed on the drawings or alternatively provided on a separate drawing.

DOORS AND ROOFLIGHTS

Details of all proposed doors and rooflights should also be provided with the application. They should be of a metric scale measuring 1:5 or 1:10 and the measurements should be written on the drawings.

APPENDIX 3

ASSESSING THE CONDITION OF TIMBER SASH AND CASE WINDOWS

Details for inspection of individual parts of sash and case windows may be found in the Historic Environment Scotland publication 'Sash and Case Windows – A short Guide for Homeowners'

<https://www.enginshed.org/publications/publication/?publicationId=9ea41caf-aa32-4827-ba08-a59100fea1a3> A sketch of a window and its parts taken from the HES guide is included after the tables.

SURVEY OF SASH AND CASE WINDOW PRO-FORMA CHECKLIST			
(transcribed from HES publication)			
Window Identification No. (from labelled sketch or photo)	Date:	Surveyor	
SKETCH OF WINDOW ow dimensions, and key to notes on condition)	TIMBER PROFILES (shapes and dimensions)		
	Sash Rail		
	Astragal/s		
	Meeting Rails		
	Sill		
DESCRIPTION OF WINDOW– note where elements are original [O] or new [N]			
Frame material	Hardwood	Softwood	Other
Paint system	Oil paint	Stain/Varnish	Other
Glazing system	Putty	Timber Beads	Other
Ironmongery	Sash lifts	Sash lock	Sash stops
	Baton Rod Fixing		
Operation	Sash Cord	Pulleys	Cord Clutch

Cleaning facility	Simplex fitting	Other	
Glazing	Glass Types		
Other features	Weights	Vents	Seals
	Draughtstripping full/partial	Mastic Pointing Eg. linseed oil & sand	
Shutters/ingoes	Elbow	Soffit	Back

CONDITION OF WINDOW – a tick-list of common defects –add notes into text box			
Description of defect		Description of defect	
Gaps leading to draughts		Timber decay in sills	
Visible gap at sill		Timber decay in sash frame – give details	
Meeting rails not level		Timber decay or defects in parting beads	
Broken sash cords		Timber decay or defects in baton rods	
Broken or cracked glass (details to be given)		Incorrect weights	
Timber decaying or damaged (specify)		Debris in weight pockets	
Previous repairs		Shutter defects (specify)	
Missing or defective putty		Ingo lining defects	
Missing or defective mastic		Structural opening defects or distortion	
Missing or defective sill bedding		Paint defects (specify)	

GENERAL COMMENTS ON EACH WINDOW

The component parts of the sash and case window

A typical sash and case window, including the terms used to describe parts of the window in this leaflet.

