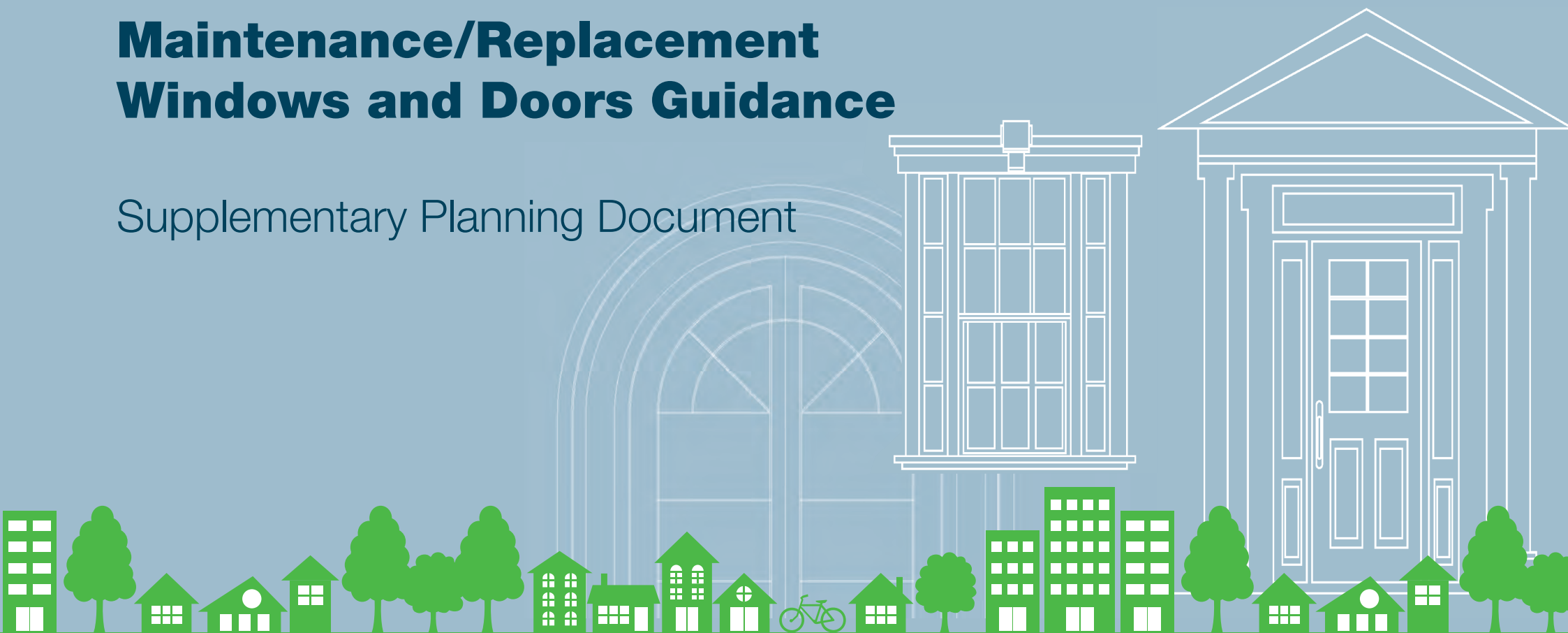


CONSERVATION AREAS

Maintenance/Replacement Windows and Doors Guidance

Supplementary Planning Document



Delivering a Gravesham to be proud of

1 Introduction	1	Low-e single glazing in replacement timber windows (for non-listed historic buildings)	16
2 Why is planning permission required for windows and doors in a conservation area?		Security	17
Article 4 directions	3	Windows	17
	4	Doors	17
3 When is planning permission/Listed building consent required?	5	8 Design elements to consider when reinstating or replacing windows	18
Unlisted buildings	5	Sash windows	18
Listed buildings	6	Glazing bars	18
Flats, maisonettes and commercial property	6	Meeting rail	19
Conditions on previous approvals	6	Horns	19
		Weights	19
4 When is planning permission/Listed building consent not required?	7	Position – window reveal	19
Planning enforcement	7	Ventilation	20
Pre-application advice for windows and doors	8	Opening	20
Professional advice	8	Casement windows	21
		Opening light	21
5 How to apply for planning and listed building consent applications.	9	Glazing bars	21
		Position – window reveal	21
6 Windows and doors maintenance plan	10	Ventilation	21
Timber windows and doors	10	Opening	22
Metal windows	12	Early modern metal windows	22
Painting	12		
Lead paint	13	9 Criteria for considering article 4 direction applications - windows	23
7 Sustainability, energy efficiency & security	14	10 Design elements to consider when reinstating or replacing doors	25
Sustainability	14	Traditional doors	25
Draught-proofing	15	Glazing	26
Secondary Glazing	15	Door furniture	26
Slim profile double glazing in replacement timber windows (for non listed historic buildings)	16	Enclosing a recessed doorway	26

11 Criteria for considering article 4 direction applications - doors	27
12 Traditional windows in Gravesham	28
Sash windows	28
Casement windows	29
Leaded light	29
Dormer windows	30
Cast iron	30
Glossary	31
Further Reading	34
Policy Background	35
Appendix (Photographic evidence for planning applications)	36

1 Introduction

1.1 Gravesham Borough Council has published this supplementary planning document, adopted 29 June 2020, for owners of unlisted buildings (buildings which have not been given a Statutory Listing by Historic England) in Conservation Areas to encourage effective participation in the preservation and enhancement of our historic environment.

1.2 This guidance document builds upon and provides more detailed information on Policies CS19: Development and Design Principles and CS20: Heritage and the Historic Environment of the adopted Gravesham Local Plan Core Strategy (September 2014). Existing supplementary planning documents and other guidance (including Conservation Area Appraisals) adopted by the Council are available online at: <https://www.gravesham.gov.uk/home/planning-and-building>

1.3 The guidance will be taken into account in Development Management decisions when considering proposals to replace or reinstate windows and doors in Conservation Areas across the Borough.

1.4 Conservation areas exist to manage and protect the special architectural and historic interest of a place - in other words, the features that make it unique. In conservation areas there are some extra planning controls and considerations in place to protect the historic and architectural elements which make the place special.

These extra planning controls and considerations are most likely to affect owners who want to work on the outside of their building or any trees on their property. Being in a conservation area might mean that your house is affected by special controls (called 'Article 4 Directions'). These restrict work you can normally do without planning permission such as replacing a door or window.

1.5 Traditional windows are often referred to as 'the eyes' of a building, providing material evidence of technologies, artisan skills and architectural styles integral to its character and the wider streetscape. Surviving windows and doors are an irreplaceable resource and contribute significantly to the character of a conservation area; the Council's approach is to preserve the integrity of historic buildings and conservation areas in Gravesham through retention, reinstatement and replacement of original architectural features for



Original timber arched sash window - Windmill Hill Conservation Area

the benefit of both present and future generations.

1.6 This design guidance explains the principles of good practice for the care of original windows and doors. It explains why repair is preferable to replacement and why some modern replacement windows and doors are considered unacceptable in unlisted buildings in conservation areas.

1.7 If you live outside a conservation area and your property is not listed, permitted development rights may allow you to replace your windows and doors without planning permission, though the requirement to use materials of a 'similar' appearance to existing examples also applies. If you are interested in preserving the character or reinstating traditional windows and doors in your property you may find the information within this guidance of interest.



Traditional six over six timber sash windows - Church Street, Higham Conservation Area



Original timber casements - Church Street, Higham Conservation Area

2 Why is planning permission required for windows and doors in a conservation area?

2.1 Planning legislation requires that special attention is paid to conserving and enhancing the character and appearance of conservation areas. With emphasis on management rather than prevention, it allows us, the Council, to consider the merits of a planning application against a conservation area's special character. Conservation Area Appraisals and Management Plans have been produced for each conservation area in consultation with the residents of the Borough. These documents are useful aids in identifying and retaining what is important in an area and they can be found on our Heritage and conservation web page.

2.2 Unless they are Listed buildings, single dwelling houses (not flats or maisonettes) may have permitted development rights (unless these have been removed) that enable certain developments to be carried out without the need for planning permission. Amongst others, these works may include changes to windows and doors. Although minimal in each case, such alterations have a cumulative effect when carried out in historic areas. Due to the need to protect some of the Borough's most historic areas, the Council has made Article 4 Directions in conservation areas which remove some of the permitted development rights of single dwelling houses within these areas. Where a property is subject to an Article 4 Direction, a planning application has to be made to the Council and determined by the Council, prior to the works being undertaken. Such works can only be undertaken if they have been permitted by the Council and must be completed in line with the permission granted.



Replacement does not respect the shape and proportions of the original window opening and glazing bars.

2.3 Article 4 Directions

2.4 An Article 4 Direction is a Direction under Article 4 of the Town & Country Planning General Permitted Development (England) Order 2015 (as amended) which enables a local planning authority to withdraw specific permitted development rights across a defined area to take account of local sensitivities.

2.5 Conservation Area Appraisals identified the loss of architectural details including historic windows and doors and use of inappropriate materials in their replacement, as contributing factors in the erosion of the special character of many conservation areas. To halt this damage to character and appearance of these areas, the Council has made Article 4 Directions in the Borough's rural and urban conservation areas.

A list of conservation areas with [Article 4 Directions](#) can be found on our website.

2.6 Please note that your property may be subject to other Article 4 Directions and/or may have had other permitted development rights removed through a previous planning application decision notice associated with your property. If you are unsure about the planning history of your property and whether or not any Article 4 Directions apply to your property, you are advised to visit the [Council's website](#) and/or to contact the Council's Development Management section at planning.admin@gravesham.gov.uk



Well-intentioned unsympathetic changes to windows and doors have had a damaging effect on our conservation areas.

3 When is Planning Permission / Listed Building Consent required?

3.1 Unlisted Buildings

3.2 For unlisted buildings subject to an Article 4 Direction in a conservation area, planning permission is required for the following works to windows or doors:

- The removal or replacement of windows and doors if there is a material change in the design, materials and profiling from those being replaced;
- Material changes¹ to in-situ windows and doors, including repairs and change of colour;
- Reinstatement of an original window or door which had previously been removed.

3.3 Guidance from Historic England explains that traditional windows can often be simply and economically repaired, usually at a cost significantly less than replacement. For timber windows this is largely due to the high quality and durability of the timber that was used in the past to make windows.

3.4 Applications to replace original/historic windows will only be supported where it can be demonstrated to the Council's satisfaction that they have deteriorated beyond practical and/or economic repair. This will require a survey report from an architect, surveyor or specialist timber joinery workshop setting out the extent of decay and justification for replacement rather than repair.



Property before replacement windows and door.
(on right)



Use of approved replacement windows in non traditional material reflecting the proportions and style of the adjacent property - Darnley Road Conservation Area.

¹ Material changes are those that would result in changes to the appearance of your building as well as how that changed element functions. In the case of alterations to windows and doors these could be the change in the profile and size of a window frame or materials that windows or doors are made of.

3.5 Listed Buildings

3.6 The alteration of a listed building² in any way that will affect its special interest requires listed building consent and possibly planning permission. Listed building consent is required for the following works to windows and doors in relation to a listed building:

- The installation of double glazing within existing window frames;
- The installation of secondary glazing;
- The removal or replacement of windows and doors;
- Material changes to windows and doors i.e. alterations to the design and materials, size, opening mechanism or proportions as well as blocking up windows and doors;
- Changing the colour of windows and doors
- Reinstatement of an original window or door.

3.7 Flats, Maisonettes and commercial property

3.8 Flats, maisonettes and commercial properties do not have the same permitted development rights as single dwelling houses and planning permission is required should you wish to replace windows and doors in such properties. Lessees and tenants whose property is under management should seek advice from the relevant property's managing body or landlord/freeholder.

3.9 Conditions on previous approvals

3.10 On occasions developments have planning conditions applied to the property which remove the normal permitted development rights associated with the property. Late 20th century and more recently constructed buildings may have further restrictions, please ensure you check for any detailed restrictions attached to the planning permission for the property. You can check for planning conditions by visiting our website's [planning applications](#) page.

² Buildings are listed in their entirety and the listing extends to structures or objects fixed to the building. It is important to note that other structures around the listed building could also be listed as curtilage structures if they date from before 1 July 1948. It is therefore important to seek advice from us before embarking on any alterations.



The integrity of the borough's (approximately 300) listed buildings are protected by the requirement of listed building consent for internal and external development - Shorne Conservation Area

4 When is planning permission/listed building consent not required?

4.1 In non-listed buildings subject to an Article 4 Direction in a conservation area, planning permission will not be required for like-for-like³ repairs and replacement.

4.2 In listed buildings, repairs to original windows and doors will not require listed building consent, providing the repair work identically matches the original form and materials i.e. like-for-like.

4.3 Planning Enforcement

4.4 If works are carried out that require consent without the relevant planning permission being received from the Council, the Council will investigate if a breach of planning control has occurred and as appropriate may seek to have such a breach of planning remedied via an enforcement notice; this can involve reinstatement of the building to its former condition.

4.5 With regards to works carried out to a Listed Building, it is also a criminal offence (under English law) to carry out works that require listed building consent without such a consent being obtained from the Council. The offence is committed by the person who carried out the works (possibly a builder) and by anyone who caused them to be carried out (someone instructing a builder). It is not a defence to say that the fact that the building was listed was not known.

4.6 Demolition of an unlisted building in a conservation area without planning permission is also a criminal offence. As with listed buildings ignorance is not a defence and penalties are the same as for listed buildings. As with listed buildings, an enforcement notice can be served to rectify any works done without planning permission or work done in breach of a condition on such a consent. Breach of the enforcement notice is itself a further offence committed by the then owner.



Like-for-like repairs do not require planning permission.

³ In both un-listed and listed buildings "like-for-like" means the same materials, details of construction, dimensions, opening method, decorative finish and details as existing including glazing type and fixing of glass (e.g. putty). The original proportions and glazing pattern must also be respected.

4.7 Pre-application advice for windows and doors

4.8 If your property is located in a conservation area to which an Article 4 Direction applies or it is listed, you may wish to consult the Planning Department if you are intending to carry out:

- External alterations - Like-for-like repairs or reinstatement
- The details of the proposed repair, alteration or replacement should always be discussed with us from the outset in a pre-application consultation to determine whether planning permission/listed building consent is required⁴
- Internal alterations - Like-for-like repairs or reinstatements to a listed building
- Alterations to the rear of your property
- Alterations to the rear of your property - Article 4 Directions and the requirement of planning permission, usually only apply to the facades of a building facing a street, public footpath or open space, but in certain cases can apply to the rear of your property. Therefore, it is advisable to seek pre-application advice if you are considering alterations to the rear of your property.

4.9 This service is not free of charge; you can find full details on the [Pre-application](#) page of our website. Alternatively, you can submit a planning application directly to the Council, further details are available on applying for planning application.

4.10 Professional advice

4.11 If you need to submit a formal application to obtain permission, we recommend that you employ the services of a professional planning agent. Details of Planning agents that are registered with the RTPI can be found [here](#).



Traditional timber panelled door - Thong Lane Conservation Area

⁴ In some instances, people have embarked on alterations believing that those alterations were like-for-like when it transpired that they were mistaken and there were differences from the original. Enforcement action has been successful on appeal.

5 How to apply for planning and listed building consent applications

You should ensure that your application includes the following:

- Existing and proposed elevation drawings to a scale of 1:50 in order to show the windows and doors in the context of the whole building;
- Scaled drawings of the joinery details at a scale of 1:10 to show the front elevation, section and plan view of each window;
- 1:2 or full size details, as appropriate of the detailed parts of the window; window head, meeting rail, cill, plan through box sash/casement and window, glazing bars etc.
- Where appropriate - 1:2 or full size details as appropriate of the detailed parts of the door; fanlights, panelling, moulding style and depth, glazing, door furniture
- Heritage Statement – refer to the Heritage Statement criteria in the Councils [Validation List](#)

The following information may also be useful to provide as part of your application:

- Photos of the building showing each elevation in its entirety with each window and/or door clearly labelled stating which are included/not included in the planning application.
- Detailed photographs of each window and door relevant to your application.
- Manufacturer's details of the proposed windows/doors – a front view of each window should be given. Each window/door should correspond with the labelling given on the existing windows/doors.
- Confirmation that the position of the window or door within the opening will not be altered unless this is to restore it to its original position.
- Please refer to the Appendix for an example of photographic evidence required.

5.3 Please ensure all documents required are submitted to GBC in order to progress your application. Refer to the Validation list on the council's website before submitting your application. The Planning Portal website www.planningportal.gov.uk contains advice on various development permissions and details of how to submit your application.



Traditional metal frame leaded light casement windows above timber sliding sashes - Cobham Conservation Area

6 Windows and Doors Maintenance Plan

6.1 With increasing awareness of energy efficiency, replacing original windows and doors with modern ready-made units is an option many home owners consider, with low maintenance being an understandable incentive. However, it is worthwhile remembering the original windows and doors in your property will have been functioning for many years and repairing rather than replacing makes sound environmental and economic sense when carried out in conjunction with upgrading security, if needed, and thermal performance.

6.2 Timber Windows and Doors

6.3 Regular maintenance of timber is the most cost effective way of prolonging the life of timber windows and doors, this increases the longevity of the timber for many years to come, with repairs almost always costing less than the cost of full replacement.

6.4 Maintenance should include re-painting windows and doors to prevent moisture penetration. However, advances in modern paint technology mean that windows, doors and frames painted in specialised exterior paints can now last up to five to ten years before external re-painting is necessary.

6.5 Without regular maintenance timber can be prone to rot due to water penetration which is often found in the bottom rail and cills of timber windows, doors and their frames. Wood rot will spread if left untreated but if caught in time can be addressed without the need for total replacement. It is a simple process for a competent joiner to repair and replace sections of rotting wood with sections of sound, treated timber on a like-for-like basis. Epoxy resins can be used as a substitute for treated timber when making minor patch repairs. Planning permission is not required for repairs on a like-for-like basis.



Removing old paint from windows and doors as part of a maintenance routine will allow you to assess for repairs.

6.6 It is good practice to check timber windows and doors for:

- Evidence of structural movement around the opening,
- Pointing between the frame and wall opening – cracked, loose or missing pointing will allow moisture and draughts to penetrate around the frame or sash-box,
- Evidence of water absorption that could lead to wood decay (wet rot),
- Interior/exterior paint failure,
- Opening of the frame joints,
- Cracked, loose or missing putty,
- Standing water on cills,
- Faulty flashings or water shedding features associated with openings,
- External cables fed through the frame will allow water to enter and could cause rot,
- Joints between the timber cill and masonry sub cill,
- Loose hinges,
- Damaged screw holes with timber dowels,
- Loose joints and panels on doors,
- Corrosion of metal fixtures and fittings,
- Broken comes (lead that holds glass in place) in leaded lights.



Exterior paint failure will allow moisture to penetrate timber.

6.7 Sashes – common faults causing restricted movement:

- Swelling due to water absorption (see above),
- Over-painting joinery,
- Stop beads – too tight,
- Pulley wheels that have seized up through over painting or lack of lubrication,
- Broken sash cords,
- Lack of lubrication on sash and pulley,
- Thicker, heavier replacement glass – weights may need adjusting.



Evidence of wood boring insects does not necessarily mean you have a live infestation.

6.8 In most cases timber decay is wet rot but wood boring insects and dry rot can also affect joinery. Evidence of wood boring insects does not necessarily mean you have an active infestation but it could mean

that structural timber has been left weakened. Detailed advice on how to assess this can be found on the [Society for the Protection of Ancient Buildings](#) website, search advice. If dry rot is suspected you should seek specialist advice from an independent chartered surveyor or consultant, not a remedial treatment contractor.

6.9 Metal Windows

6.10 Metal windows, as with timber, benefit from a regular maintenance plan to ensure your windows last as they should. Common defects that occur in metal windows include: distortion, build-up of paint, rust (due to exposure of bare metal), corrosion and hinge and fitting failures. Corrosion and its repair are dependent on the fabric of your window, corroded sections of wrought iron windows can be cut out and replacement sections welded in. Repair of cast iron is more difficult as it will require 'cold metal stitching' which is a specialist process. The maintenance of galvanised steel windows (popular post WW1 and commonly known as 'Crittall') is relatively simple; repair putty and glazing if necessary and remove excess paint from frames, being careful not to damage the galvanised finish. Bare metal should be primed and finished with paint specific to the fabric of the windows.

6.11 It is good practice to check your metal windows for the following in addition to the above:

- Corrosion of metal framing
- Corrosion of metal fixtures and fittings
- Build-up of paint restricting closure and movement
- Signs of rusting
- Distortion of the frame
- Broken comes (lead that holds glass in place) in leaded lights

6.12 Painting

6.13 Slow grown softwoods such as pine, used in the 19th and 20th centuries, were traditionally painted. Timber stains and varnishes are modern introductions and are not traditional finishes.

Changing the external colour of windows and doors will require planning permission where the building is



Historic metal casement windows still survive in urban and rural Conservation Areas - High Street Conservation Area



Windows and doors painted in traditional colours - Chestnut Green Conservation Area

listed or has an Article 4 Direction in place that restricts the change in colour. If you are considering changing the colour, it would be advantageous to look at similar properties with original details in the vicinity and paint manufacturers 'Heritage' exterior colour ranges, appropriate to the age of your property, to inform your choice.

6.14 Lead Paint

6.15 Up until the mid-1960s lead was often in paint used on; external metal work, windows and doors, internal woodwork and metalwork i.e. radiators and pipes. Sometimes lead paint has been buried under subsequent layers. If you are uncertain it should be assumed that it is there and you should follow guidance on the [safe removal of lead paint](#). If you are employing a professional, ask them how they are going to deal with this possibility.

6.16 For in-depth advice on the care and maintenance of traditional windows Historic England have produced detailed guidance in [Traditional Windows Their Care, Repair and Upgrading](#) and the Society for the Protection of Ancient Buildings produces guidance on a wide range of issues relating to maintenance and repair. (see further Reading)



Changing the colour of your windows and doors will require permission if your building is listed or has an Article 4 Direction in place.

7 Sustainability, Energy Efficiency & Security

7.1 Historic homes can be made more energy efficient while maintaining their special character and appearance while reducing heat loss and draughts. Certain classes of historic building are exempt from energy efficiency upgrades when thermal elements are replaced or renovated. Conservation areas where surface materials and details contribute to the character of the area are exempt under Building Regulations Part L – Energy Conservation.

7.2 Historic England has produced comprehensive guidance on [Draught-proofing windows and doors](#) and [Secondary Glazing](#) which detail the principles, risks, materials and methods for upgrading the thermal performance of windows and doors.

7.3 Sustainability

7.4 A Climate Emergency was declared by Members of the Council on 25 June 2019, and thus reuse and recycling is more important than ever. Renovating what we have and reusing old materials when the opportunity arises is fundamental in helping tackle these issues. Metal windows and timber in original windows and doors is very rarely unrepairable.

7.5 The comfort and energy efficiency which comes with newly fitted window and door frames and integral draught proofing are benefits that can also be achieved through repair and draught proofing of existing windows and doors or from fitting secondary glazing.

7.6 Alternatively, in non-listed historic buildings, where there are single or two pane sash windows, double glazed units can be installed into existing sash boxes using 12mm thick slim line Low-emissivity⁵ double glazing, thereby retaining the embodied energy of the existing timber which is usually very good quality Baltic timber. The use of double glazing in an existing sash window will require the sash weights to be re-balanced due to the increased weight of the glazing unit.



Example of well fitted secondary double glazing with proportions matching original window dimensions and glazing details - Darnley Road Conservation Area

⁵ Commonly known as low-e glass, a type of energy-efficient glass designed to prevent heat loss.

7.7 Draught-proofing

7.8 Older buildings are prone to heat loss through cracks and gaps which develop as building elements move and distort over a period of time. This is often the case around windows and doors and can be a major source of heat loss. Pointing between the frame and wall opening should be investigated prior to any works to your windows and doors as this could be the cause of draughts and heat loss.

7.9 If you have internal/external wooden shutters these provide additional privacy and security, reduce heat loss and help with noise insulation. The use of heavy curtains for windows and doors will also reduce heat loss.

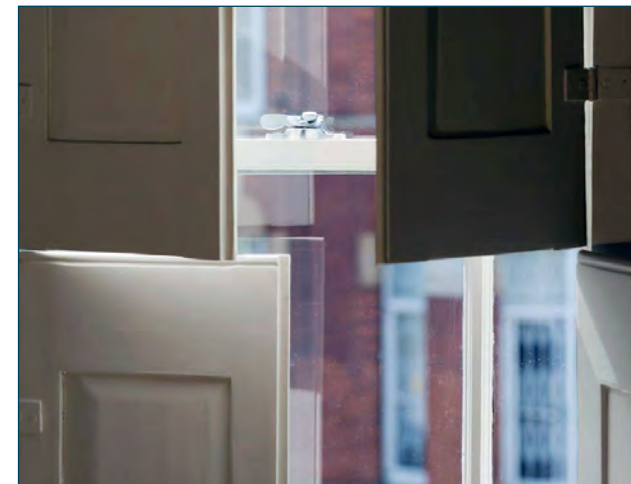
7.10 Draught proofing can reduce air leakage from windows and doors by between 33% - 50%, significantly reducing the heating requirement for a room⁶.

7.11 In non-listed properties draught proofing will not require consent. For Listed Buildings, you will need to look at the detail of your building's listing to determine if such additions would impact on the designation. We recommend that you contact us for confirmation if your building is listed on planning.admin@gravesham.gov.uk.

7.12 Secondary Glazing

7.13 Windows - A cost effective alternative to double glazing which allows existing windows to remain intact with little or no impact on the buildings appearance. Secondary glazing increases thermal performance, security and can be highly effective at reducing noise if a larger gap is left between the window panes.

7.14 Doors - Secondary glazing systems can be secured to the frame of single glazed upper panels, fanlights and side windows in front doors to improve the thermal performance and preserve the original etched or stained glass.



Internal and external wooden shutters will provide extra security and insulation



Secondary glazing designed to open by the same method as the external window.

⁶ <https://historicengland.org.uk/images-books/publications/eehb-draught-proofing-windows-doors/heag084-draughtproofing/>

7.15 In non-listed properties secondary glazing will not require consent. For Listed Buildings, you will need to look at the detail of your building's listing to determine if such additions would impact on the designation. We recommend that you contact us for confirmation if your building is listed on. [Planning.
admin@gravesham.gov.uk](mailto:admin@gravesham.gov.uk)

7.16 Slim profile double glazing in replacement timber windows (for non-listed historic buildings)

7.17 Slim double glazing (12mm thick sealed units) is acceptable in non-listed historic buildings within the conservation area and does not require planning permission provided only the glazing is being replaced or that the replacement joinery accurately replicates the appearance of the original in terms of material, profile and detailing i.e. like-for-like.

7.18 Windows must use solid (through) glazing bars to replicate any original windows and the timber profiles should be matched to the original profiles. Glazing bars applied to the surface of a sealed glazing unit will not be acceptable. The glazing unit can be puttied into conventional size timber sashes/casements and glazing bars, leaving no signs of double glazing.

7.19 When considering double glazing in like-for-like frames, we will ask for a new slim double glazing technology with a total glazing thickness of 9-12mm (3-4mm glass, 3-4mm gas, 3-4mm glass) to be used. These windows are likely to weigh more than the single glazed windows being replaced, so the weights in timber sashes may also need to be rebalanced.

7.20 Replacing historic stained, leaded or etched glass with this method of glazing is not acceptable.

7.21 Low-e single glazing in replacement timber windows (for non-listed historic buildings)

7.22 Low-e single glazing is acceptable and does not require planning permission in un-listed properties provided only the glazing is being replaced or that the replacement joinery accurately replicates the appearance of the original in terms of material, profile and detailing i.e. like-for-like.



Example of existing original stained and coloured glass. It is important to retain original glazing when replacement is necessary as modern double glazing cannot replicate originals.

7.23 Windows must use solid (through) glazing bars, not applied glazing bars, to replicate any original windows and the timber profiles should be matched to the existing profiles. The glazing unit can be puttied into conventional size timber sashes/casements and glazing bars.

7.24 Energy efficient 'low-e' coatings reduce thermal radiation, together with draught proofing it can reduce heat loss through the glass and frame.

7.25 Replacing historic stained, leaded, or etched glass with this method of glazing is not acceptable.

7.26 Security

7.27 Internal security upgrades to windows and doors do not require planning permission in unlisted buildings in a conservation area, however such alterations will require listed building consent for listed buildings.

7.28 Windows

7.29 Traditional sash window catches and casement latches are not sufficient on their own. There is a wide variety of ironmongery on the market to upgrade the security on windows; locks, dual screws, anti-lift devices (sash stops), key operated locks for casements, mortice bolts and sash chains increase security on traditional windows. If you have internal/external wooden shutters these provide additional security and insulation.

7.30 Doors

7.31 Additional security measures on doors can be easily incorporated without affecting the character of the door, for example extra mortice locks, rim locks and bolts. However, such alterations to a historic door may cause harm to the significance of a listed building and the conservation officer should be consulted through the pre-application advice service before such work is carried out.



Example of a modern double glazed uvpc door next to a timber door with original stained and coloured glass in an urban Edwardian terrace.



Detail of original stained and coloured glazing in an original timber door in an urban Edwardian terrace.

8 Design elements to consider when reinstating or replacing windows

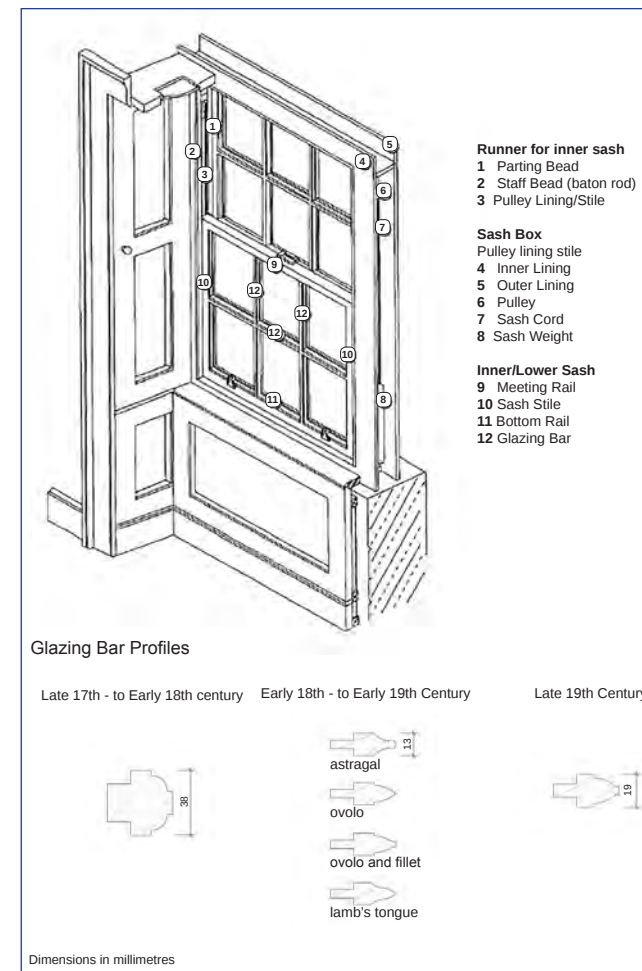
8.1 If you are thinking about reinstating or replacing traditional windows, it is important to think very carefully about the type of replacement window being utilised, any replacement should match the original window as far as possible. Applications to replace original/historic windows will only be supported where it can be demonstrated to the Council's satisfaction that they have deteriorated beyond practical/economic repair. Survey reports by a surveyor, or joiner, with experience in the repair of windows, should be submitted with your application describing the extent of decay to each window that it is to be replaced and discussing the options for repair or why such repairs cannot be carried out.

8.2 The following design elements detailed below must be considered when looking to replace or reinstate. You will need to supply detailed designs and implementation methods when submitting your application. In the case of replacing like-for-like, where planning permission is not required, we strongly advise you to apply for Pre-application advice to prevent possible enforcement action at a later date.

8.3 Sash Windows

8.4 Glazing Bars

8.5 Glazing bars should be of a traditional profile (according to the age of the property) or match any existing original windows. In all cases glazing bars should match the original in position and size. Bars inserted into or applied onto double glazed window units are inappropriate and not acceptable. Machine routing after assembly is not appropriate to the character of traditional glazing bars. See traditional sash window components illustration for glazing bar details.



Components of a typical timber sash window.

8.6 Meeting Rail

8.7 Particular attention must be paid to the meeting rail, where the upper and lower sashes overlap; this should not exceed 34mm when closed or where an original window survives it should match that window.

8.8 Horns

8.9 In the 19th century, windows were strengthened to accommodate larger panes of glass with projections known as horns. It is important to avoid the use of horns where they have not been used historically, for example they would not have been used on a Georgian house with multi-pane windows but are a common feature on Victorian and later properties with large single or double paned windows.

8.10 Weights

8.11 The weight of the sash is counterbalanced by a lead or cast iron weight within the outer frame or box. This weight is connected to the window by a waxed sash cord with a pulley at the top of the frame. Spring balances are sometimes used on modern sashes, these are not acceptable in listed buildings but will be considered appropriate on non-listed buildings.

8.12 Position – window reveal

8.13 The position of the sash within the opening is important and as with other details should reflect the age of the property. Up until the early 18th century sashes had their box frames exposed, finished with an architrave surround and set flush with the outer face of the wall. By 1709 The London Building Act required the sash box to be set back four inches with the sash box still fully exposed. The 1774 Act required the sash box to be hidden behind the reveal for fire protection.



Meeting rail



Horn - common feature on sash windows from the Victorian period onwards.

8.14 Ventilation

8.15 Trickle vents that provide background ventilation are commonly seen in modern windows, these would not have been an original feature on sash windows. In many cases this type of ventilation is not needed as ventilation can be achieved by a ventilation latch on the window itself. Visible trickle vents are not acceptable on un-listed historic buildings. Trickle vents are not acceptable on listed buildings.

8.16 Opening

8.17 When replacement is necessary existing window openings should be used. If, however you propose to alter the position, shape or size of the window opening the positioning should be carefully considered and the architectural integrity of the building retained. It is important to ensure that additional windows match existing in terms of materials and design features such as brick arch detailing and stone cills. The overall size of the window must be kept in proportional harmony with the rest of the façade and new windows should be sited to minimise overlooking adjacent properties. Planning permission will be required for such alterations.



1. Glazing Bars, 2. Position - window reveal, 3. Trickle Vent. These details apply to both sash and casement windows.

8.18 Casement Windows

8.19 Opening Light

8.20 The opening light of a traditional casement was always set flush with the frame or recessed when closed and is known as a flush casement. This detail sets apart a traditional casement from many modern 'off the peg' windows that are storm proofed, where the opening light is set atop the frame. This detail must be taken into consideration when replacement is being proposed.

8.21 Glazing Bars

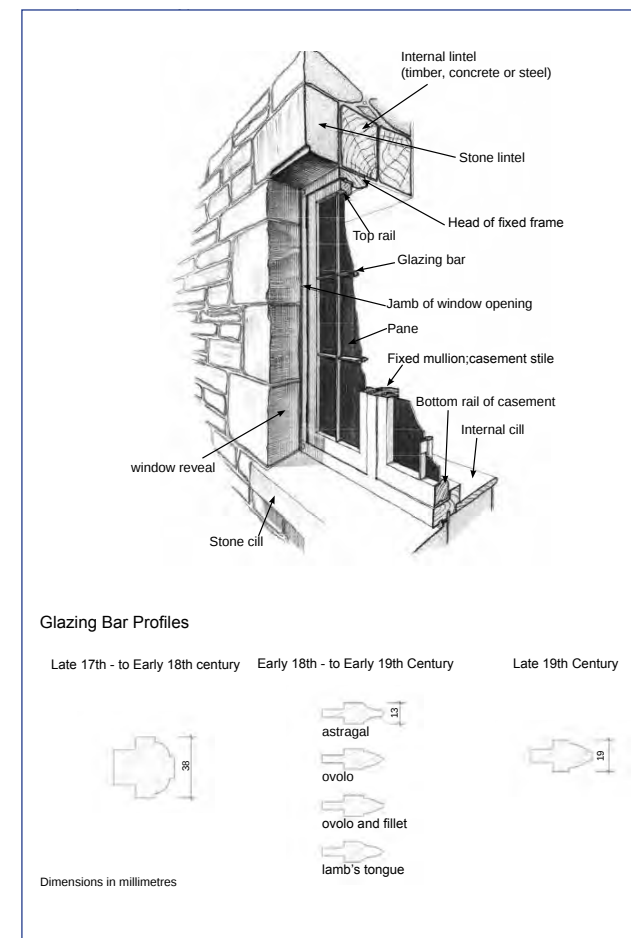
8.22 Glazing bars should be shaped to a traditional profile (according to the age of the property) and mitred to the frame. Bars inserted into double glazed window units are inappropriate and not acceptable. Machine routing after assembly is not appropriate to the character of traditional glazing bars. See traditional casement window components illustration for glazing bar details.

8.23 Position – window reveal

8.24 The position of the casement within the opening is important and as with other details should reflect the age of the property. Up until the early 18th century windows had their frames exposed, finished with an architrave surround and set flush with the outer face of the wall. By 1709 The London Building Act required the window frame to be set back four inches with the frame still fully exposed. The 1774 Act required the frame to be hidden behind the reveal for fire protection.

8.25 Ventilation

8.26 Trickle vents that provide background ventilation are commonly seen in modern windows, these would not have been an original feature on casement windows. In many cases this type of ventilation is not needed as ventilation can be achieved by additional air vents or a ventilation latch on the window itself. Visible trickle vents are not acceptable on un-listed historic buildings. Trickle vents are not acceptable on listed buildings.



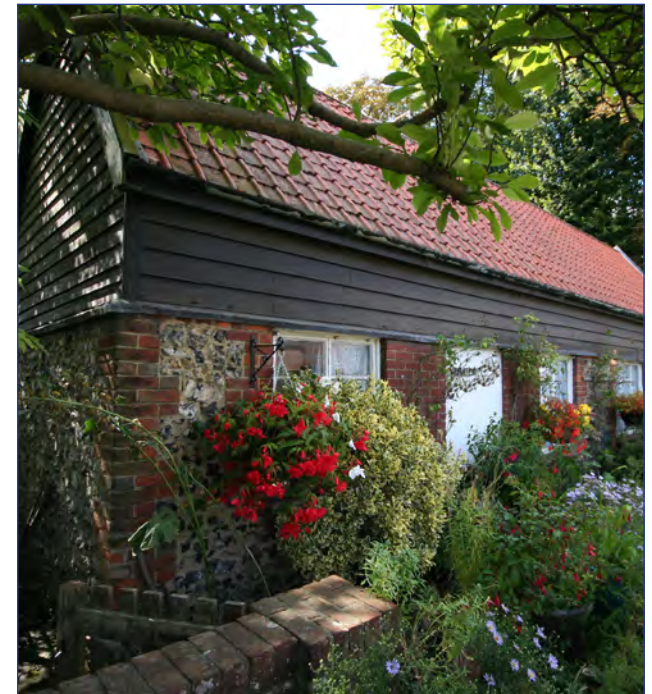
Components of a typical timber casement window

8.27 Opening

8.28 When replacement is proposed, existing window openings should be used, if however, the shape or size of the window openings are altered their position should be carefully considered and the architectural integrity of the building retained. With additional windows, ensure they match existing in terms of materials and design, features such as brick detailing and cills should be copied. New windows should be sited to minimise overlooking adjacent properties. Planning permission and building regulations will be required.

8.29 Early Modern Metal Windows

8.30 Early modern metal framed windows should be repaired (see Maintenance and Care) if this is not possible they should be replaced with matching windows of the same materials and design. Survey reports by a surveyor, or specialist metal window manufacturer with experience in the repair of metal windows, should be submitted with your application describing the extent of decay to each window that is to be replaced and discussing the options for repair or why such repairs cannot be carried out.



Early modern metal casements. Hook Green Conservation Area

9 Criteria for considering Article 4 Direction applications - windows.

The Council has adopted the following criteria for assessing applications for window alterations/replacements in unlisted buildings where an Article 4 Direction is in place:

1. Use of purpose made or high quality factory made timber sash/casement windows. Planning permission not required if windows are an exact copy, like for like, or replica.
2. Use of factory made timber sash windows or uPVC vertical sliding sash windows as replacements for Victorian/Edwardian one over one or two over two sash windows (i.e. windows with one or two panes, not Georgian style multi-paned windows which are commonly divided into six or eight small panes for each sash). Approve subject to choice of manufacturer and detailing; ensure that vertically sliding sashes are proposed.
3. Use of factory made timber or uPVC casements as replacements for Victorian/Edwardian casement windows. Approve subject to choice of manufacturer and detailing and ensure that casement is flush with the frame or recessed when closed. Use of aluminium profile casement windows in suburban houses (post 1920). Approve subject to choice of window style. In many cases aluminium replacements can match the appearance of original metal framed Crittal windows.
4. Applications to replace inappropriate modern windows in pre 1920 houses (i.e. houses originally built with timber sashes and casements) or post 1920 (i.e. houses originally built with metal framed [Crittall] windows). Approve subject to choice of style of replacement unit. The replacement should match the appearance of traditional sashes/casements/metal framed windows as far as possible.
5. Applications to replace traditional vertical sliding timber sash/casements windows with standard uPVC units (i.e. side hung, top hung, bottom hung, horizontal pivot, vertical pivot or louvre) will be refused.

6. uPVC or aluminium finish sliding sashes and casement windows which meet the colour, positioning and hanging criteria set out above, on non-principal or non-public elevations (elevations with no street frontage or open to public view) where it can be demonstrated that they do not harm the character or appearance of the conservation area and taking into consideration the age and style of the building and its immediate surroundings will be considered acceptable



Image courtesy of The London Picture Archive



Researching your property's history can uncover documentation of original features - Thong Lane Conservation Area

10 Design elements to consider when reinstating or replacing doors

10.1 The front door and its surround is one of the most prominent features of a house, if original it is unique to your property and a valuable asset as it informs us of its history and status. Some of the front doors in the Borough's conservation areas may well be over a 100 years old and can last for many more if maintained.

10.2 The timber used in older doors is often superior in quality, it is either native hardwood or imported slow-grown softwood from the Baltic. In both cases it is often superior to the faster grown softwoods available today. Modern softwood has a high degree of sapwood, which lacks natural durability and when damp will be more readily attacked by beetle or rot. Modern hardwoods are expensive and in some cases linked to unsustainable forestry practices.

10.3 When considering reinstating or replacing a traditional door, it is important to think very carefully about the type of replacement door to be used and to ensure it matches the original door as far as possible. Applications to replace original/historic doors will only be supported where it can be demonstrated to the Council's satisfaction that they have deteriorated beyond practical/economic repair. Survey reports by a surveyor, or joiner, with experience in the repair of doors, should be submitted with the relevant planning application describing the extent of decay to each door that is to be replaced and discussing the options for repair or why such repairs cannot be carried out.

10.4 Traditional Doors

10.5 Traditional doors and doorways are usually solid timber frame construction with inset panelling and/or glazing retained by mouldings.

10.6 Reinstated doors must match traditional designs typical of the area.

10.7 Where a building has lost its original door it should be reinstated with a purpose made timber door based on historic evidence or original doors in the same street, or adjoining properties. When replacing a historic door, features should match the original door or a typical historic door in the area.



1. Fanlights, 2. panelling, 3. Moulding style and depth, 4. Door furniture; letter box, door knocker etc, 5. Glazing, 6. Traditional painted finish (not stained or varnished)

10.8 Glazing

10.9 Replacements should match the originals. Decorative glass plays an important ornamental role and should always be repaired and retained where possible within a replacement door, its surround and fanlight. Original glazing makes a positive contribution to the historic appearance of the building when reused. If the existing joinery is beyond repair it will be acceptable to replace it with new joinery sections matching the original.

10.10 Door furniture

10.11 Original door furniture should be retained and reused or age appropriate reclaimed door furniture or modern replicas in appropriate material used.

10.12 Enclosing a recessed doorway

10.13 Many older properties have recessed front doors with decorative stained or coloured glass in side panels and fan lights and contribute to the street-scape. Enclosing the recess with a modern door detracts from the character of the building and those surrounding it, especially if it shares architectural details with neighbouring properties e.g. attached houses where the front doors are situated next to each other (halls adjoining houses.)

10.14 The original inner door should be checked for repairs if draughts are an issue and the reason for wishing to enclose the recess. Planning permission will be required for enclosing a recessed doorway.



Original maintained doorways



Enclosing recessed doorways detracts from shared features and the area's character.

11 Criteria for considering Article 4 Direction applications - doors

The Council has adopted the following criteria for assessing applications for door alterations/replacements in unlisted buildings where an Article 4 Direction is in place:

1. Use of purpose made or high quality factory made timber doors and frames.
Planning permission not required if doors and frames are an exact copy, ⁷like-for-like, or replica.
2. Applications to replace inappropriate modern doors. Approve subject to choice of style of replacement door. The replacement should match the appearance of traditional doors as far as possible.
3. Applications to replace traditional timber doors with a standard composite door and frame (i.e. modern factory manufactured doors using modern materials) will be refused.
4. Leaded lights replicated by plastic or applied lead strips will be refused.

⁷ "like-for-like" means the same materials, details of construction, dimensions, opening method, decorative finish and details as existing including glazing type and fixing of glass (e.g. putty). The original proportions and glazing pattern must also be respected.

12 Traditional Windows in Gravesham

Within the borough there are generally three types of traditional windows, sliding sashes, side hung casements and post 1920/30s metal and timber casement windows.

Up until the early 18th century windows had their frames exposed, finished with an architrave surround and set flush with the outer face of the wall. By 1709 The London Building Act required the window frame to be set back four inches with the frame still fully exposed. The 1774 Act required the frame to be hidden behind the reveal for fire protection.

Although this legislation came into being in 1709 it took some time before everyone complied with the legislation and indeed the farther away you travelled from London the less likely the compliance would be carried out with haste. The Borough's rural and urban conservation areas still have good examples of early frames set flush with the wall.

12.1 Sash Windows

Introduced into Britain in the 17th century, sashes remained the most common window type in new buildings up until the early 20th century. Sash windows are almost always made from softwood, commonly pine, hardwood frames such as oak can be found in grander houses throughout the country.

Double-hung sash consist of two glazed frames or sashes, the front sash is suspended in the top half of the frame and the rear sash forms the bottom half. Sashes are counter balanced by lead or cast iron weight suspended in hollow sections of the window framework, allowing the windows to move up and down.

Single-hung has the upper frame fixed directly to the frame, with counter weights or pegs used to hold the bottom window open.

Yorkshire sash has one fixed sash and one sliding sash that move horizontally. This type of sash is usually found on small farmhouses or cottages.



Timber sash windows



Leaded light timber Yorkshire sash

Glazing patterns were usually 12 pane sash windows, six panes over six (in some cases individual panes are broader than they are tall) and divided three panes wide to four panes high. Advances in the manufacture of glass saw the production of larger panes, so the total number of panes and glazing bars decreased from those in the early Georgian period. By the mid-19th century the use of plate glass meant that sash windows were often divided into four panes and eventually two. Larger panes meant that sashes needed to be strengthened and short upward or downward projections called 'horns' were added to the corner of the sash meeting rail to retain stability and are a common feature on Victorian sash windows.

12.2 Casement

A hinged window usually hung on the vertical and latched shut with an iron catch or held open with an iron stay. Originally seen with multiple panes per window, advances in glass manufacture saw the number of panes often reduced to two with one horizontal glazing bar.

Casements were the common form of window before the introduction of sash windows in the 17th century. Around the beginning of the Victorian period, casement frames were usually made of timber, although examples of leaded wrought iron framed windows, with stone mullions, still exist in the Borough. Casements can also be found elaborated with Gothick arches or smaller panes and date from the mid-19th century. A top hung casement, the hinging of a small section of window to provide a small top opener, was uncommon until the 20th century when the manufacture of galvanized steel windows became popular.

12.3 Leaded Light

Leaded light windows are found in buildings from different periods and consist of multiple panes of glass set in lead bars (comes) which hold the structure together. When light falls on a traditional leaded light, whatever period it is from, it creates a multi-faceted effect that cannot be replicated with strips of lead stuck on the surface of large panes of glass or sandwiched between double glazing. The repair of leaded lights is a specialist task and should be undertaken with care and caution by a reputable company.



Timber casement windows



Cast iron leaded light casement windows

12.4 Dormer Windows

A dormer is a frame projecting from a pitched roof. Typical construction is a roof, two sides (cheeks) and a window. Most dormers project above the line of the pitched roof although they can be recessed or semi-recessed. Dormer windows can consist of casement or sashes and should be maintained as other windows in your property. Secondary glazing could prove difficult due to the size or lack of cills.

12.5 Cast Iron

Cast Iron windows in former industrial properties in Gravesend Town Centre industrial and institutional building have a variety of window types, depending on their age and function. Original windows should be retained wherever practicable, although flexibility on window design may be acceptable to allow for conversions. By retaining original windows and doors in buildings that have changed use we preserve the heritage of the area.



Dormer windows - Shorne Conservation Area



Cast iron windows - High Street Conservation Area

Glossary

Article 4 Direction

A Direction removing some or all permitted development rights, for example within a conservation area or curtilage of a listed building. Article 4 Directions are made by local planning authorities.

Came

A divider bar used between small pieces of glass to make a larger glazed panel. An H-shaped came holds two pieces of glass together and U-shaped sections are used for borders.

Conservation Areas

Areas of special architectural or historic interest, designated under the Planning (Listed Building & Conservation Areas) Act 1991, the character, appearance or setting of which it is desirable to preserve or enhance. Permitted development rights may be restricted in these areas.

Character

Refers to the features of a Conservation Area or Listed Building, including the appearance of any place in terms of its landscape or the layout of streets and open spaces, giving it a distinct identity.

Curtilage

Curtilage can be defined, for the purposes of the listed building legislation, as an area of land around a listed building within which other buildings pre dating July 1948 may potentially be considered listed. Not all buildings will have a curtilage. With those that do there will be cases where the extent of the curtilage will be clear (such as a garden boundary) but in others it may not be as clear each case will always be a question of fact and degree. A decision taker may take the following factors into account in assessing the matter: i) the physical layout of the listed building and the building; ii) their ownership past and present; and their use or function past and present specifically whether the building was ancillary (i.e subordinate to and dependent on) the purposes of the listed building at the date of listing.

Dry Rot

Fungal timber decay occurring in poorly ventilated conditions in buildings, resulting in cracking and powdering of the wood.

Glazing bars

A ridged supporting strip between adjacent panes of glass.

Halls Adjoining Houses

A pair of attached houses where the front doors are situated next to each other.

Like for like

The same materials, details of construction, dimensions, opening method, decorative finish and details as existing including glazing type and fixing of glass (e.g. putty). The original proportions and glazing pattern should always be respected.

Listed Building Consent

Consent required for the demolition, in whole or in part of a listed building, or for any works of alteration or extension that would affect the character of the building.

Listed Buildings

Listed buildings are graded I, II* or II with grade I being the highest. Listing includes the interior as well as the exterior of the buildings also any buildings or permanent structures, e.g. wall, within its curtilage. Historic England is responsible for listing buildings in England.

Permitted Development

Nationwide planning permission to carry out certain limited forms of development without the need to make a planning application. These provisions are granted under the Town and Country Planning (General Permitted Development) (England) Order 2015. It should be noted that local planning authorities have the power to remove permitted development rights through planning conditions or Article 4 Directions.

Planning Consultant

A company or individual that specialises in providing advice on planning matters.

Recessed Porch

Where the front door sits further back than the rest of the house's front wall with a protruding first floor room above and to the side.

Wet Rot

State of decay in timber caused by various fungi affecting timber with high moisture content.

Wood boring insects

A worm or larva that breeds in or bores into wood.

Further reading

[Dormer windows Historic England](#) advice on insulating dormer windows

[Energy efficiency and historic buildings](#) draught-proofing windows and doors. Historic England

[Secondary glazing](#). Historic England

[The Society for the Protection of Ancient Buildings](#) (SPAB) useful information on a wide range of topics regarding the maintenance of your property, including woodworm.

<https://www.spab.org.uk/advice/timber-windows>

<https://www.spab.org.uk/advice/technical-qas/technical-qa-8-metal-windows/>

<https://www.spab.org.uk/advice/technical-qas/technical-qa-5-old-doors/>

[Traditional windows their care, repair and upgrading](#). Historic England

[Wrought iron and steel windows](#) by Eleni Makri. Cathedral Communications Ltd (GBC does not formally 'approve' or 'recommend' the companies listed within this link)

<http://www.thebrooking.org.uk/> National Collection of Architectural Details

[The Georgian Group](#) English and Welsh conservation organisation created to campaign for the preservation of historic buildings and planned landscapes of the 18th and early 19th century

[The Twentieth Century Society](#) safeguarding the heritage of architecture and design in Britain from 1914 onwards.

[The Victorian Society](#) charity championing Victorian and Edwardian buildings in England and Wales

Policy Background

- NPPF 12 Achieving well-designed places para 124-132
- NPPF 16 Conserving and enhancing the historic environment para 184-202
- Planning (Listed Buildings and Conservation Areas) Act 1990 (the Act)
- Policies CS19: Development and Design Principles and CS20: Heritage and the Historic Environment as detailed in our [Local Plan Core Strategy](#) adopted September 2014
- Gravesham's Conservation Areas Appraisals and Management Plans
- Historic England Guidance Notes

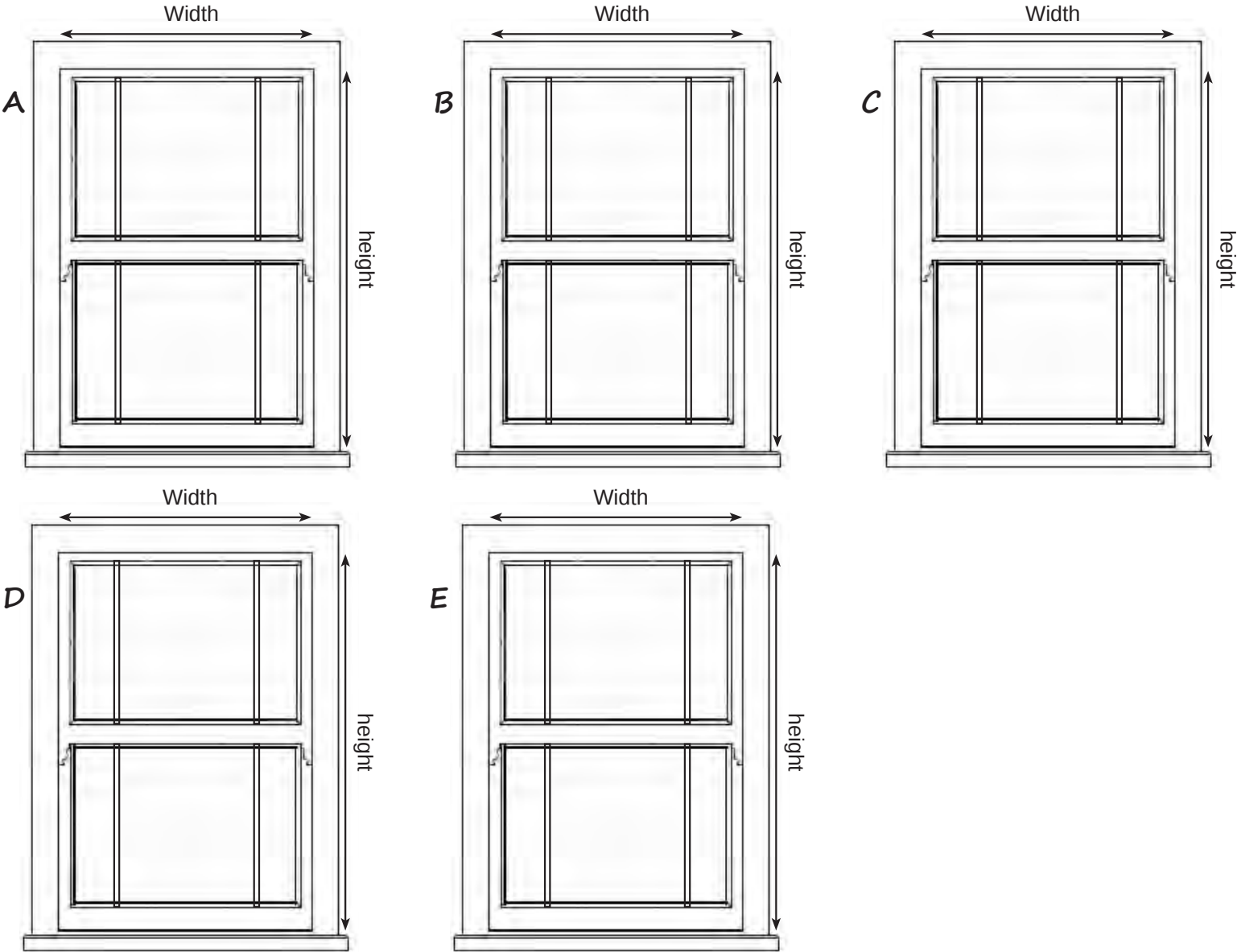
Appendix - Photographic evidence for planning application

Front elevation *insert property address and planning reference*



- A** Window A not to be replaced, not included in application
- B** Window B to be replaced, included in application
- C** Window C not to be replaced, not included in application
- D** Window D to be replaced, included in application
- E** Window E to be replaced, included in application

Front elevation *insert property address and planning reference*



Side elevation (N/S/E/W) *insert property address and planning reference*



F Window F cill to be replaced, included in application

G Window G to be replaced, included in application

H Window H to be replaced, included in application

Side elevation (N/S/E/W) *insert property address and planning reference*

