

GEORGE BARNSDALE
ESTABLISHED 1884

Pivot Windows



Lasting Performance Through Innovation
Timber Windows & Doors

Pivot windows have developed to provide a simple and effective opening method allowing cleaning from the inside.

The mechanics of the hardware system allow for a wide range of shapes and are able to support large weights.

The George Barnsdale Pivot Window has been extensively developed using the best available hardware that produces a simple and smooth operation capable of supporting sashes of up to 250kg in a wide variety of shapes.

The window has been extensively developed to provide the highest levels of performance, all backed up by third party testing.

The pivot window range provides:

- A premium product manufactured from the finest materials with a wide range of options for matching period and contemporary features.
- Engineered timber providing excellent durability, all from certified, sustainable sources.
- Market leading warranties with a 10 year paint guarantee as standard.
- Excellent weather performance with third party test validation.
- High quality hardware and design features providing enhanced security.

This brochure provides you with information on the window features and the main options that we offer (there is a wider range of options available on the website). If you have any requirements outside of these, we have a wealth of experience in customising our products, whilst maintaining the performance characteristics.

Our company brochure also provides further detail on the products, materials, processes and performance of the George Barnsdale window and door range.

Multipoint Locking



The multipoint locking system provides locking points around the sash. In addition to excellent security performance, these fixing points prevent the timber from moving, contributing to the long life of the window.

Flush Hinges



Advanced hinges allow large, heavy sashes (up to 250kg) to pivot around either the horizontal or vertical axis with 180 degrees of rotation. High quality flush fitting hinges produce an excellent finish to the product.

Internally Beaded Sashes



All sashes are glazed from the inside providing enhanced security, improved weather performance, as well as protecting the bead resulting in longer life. The sashes are also drained and vented to ensure the glazing system is protected allowing it to provide long term performance.



Window as shown: Horizontal pivot sash finished is white internal and external.

Astragal Bars



Attention to detail is no clearer than on our astragal bars which, by precisely counterprofiling the sash, give an unparalleled finish. External bars are manufactured from Accoya and dowelled into the sash for exceptional performance.

Sash & Frame Vents



We offer a wide range of vent options, both in the sash and the frame. Options include canopy vents and flush vents in a range of colours and styles. It is also possible to colour match if required.

Draught Seals



All products have multiple draught seals which provide excellent weatherproofing and thermal insulation.

Openings



Closed

Concealed hinges and locking system provide a clean, attractive aesthetic. With a wide range of options, the window can be matched into existing window styles or the requirements of the property.



Half

The mechanics of the pivot hinge ensure that the sash is pivoting around its centre of gravity, allowing even the heaviest of sashes to be rotated with little effort.



Full

180° movement allows the sash to be rotated to allow the external glass to be cleaned easily from the inside. This movement can be achieved with almost any shape that is symmetrical along the pivot axis.

Handle Options

The handle choice has a huge impact on the visual appearance of the window and we provide a range of options to allow you to get the appearance you require.



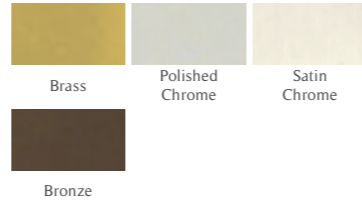
Affinity

Our standard handle, providing a traditional ergonomic design with push button locking and a range of colour options. This is an excellent option for a wide range of property styles. Matching fittings available across our window and door ranges.



Celtic

Our mid-range handle offers an attractive traditional design coupled with high quality materials. It is available in a range of colours with locking as standard.



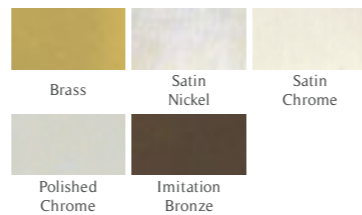
Allart - 0350

Premium quality Frank Allart design based on original period designs. Available in a range of colours with locking as standard. Matching fittings are available across our window and door range.



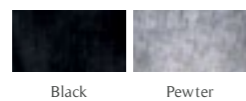
Allart - 0352

Premium quality Frank Allart design based on original period designs. Available in a range of colours with locking as standard. Matching fittings are available across our window and door range.



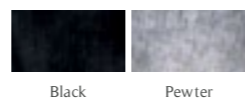
Monkey Tail

An antique ironwork design giving a rustic appearance ideally suited to many traditional cottages and farmhouses. It is available in matt black or antique pewter. Complimentary fittings are available on many of our other products including our door ranges.



Bulb End

An antique ironwork design giving a rustic appearance ideally suited to many traditional cottages and farmhouses. It is available in matt black or antique pewter. Complimentary fittings are available on many of our other products including our door ranges.



Layout / Opening Options

We make all windows to your specification which means that we can supply any layout of window that is required. This may include:

Sash Opening: Sashes can either be fixed, pivot horizontally or pivot vertically.



Fixed Sash

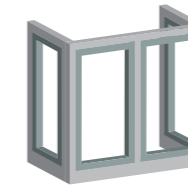


Vertical

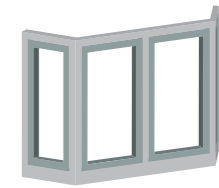


Horizontal

Bay Windows: We are able to supply all windows in the range as a bay window. The position of fixed and pivoting sashes needs to be considered to ensure they can open correctly.



Square Bay

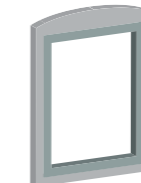


Angled Bay

Round Work / Arches: We can provide a wide range of curved work designs, including internal sash arches (to top and bottom rails) as well as simple arch linings.



Internal Arch



Arch Fillet



Circular

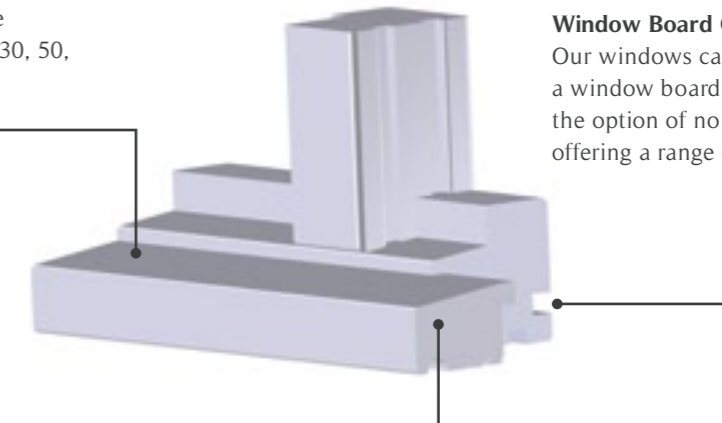
Frame Options

Cill Extension:

Allows the cill to extend over the brickwork. As standard we offer 30, 50, 70, 90 & 110mm extensions.

Cill Side Extensions (CSE):

Many replacement windows require cill side extensions. As standard we offer 25, 50, 75 and 100mm extensions.

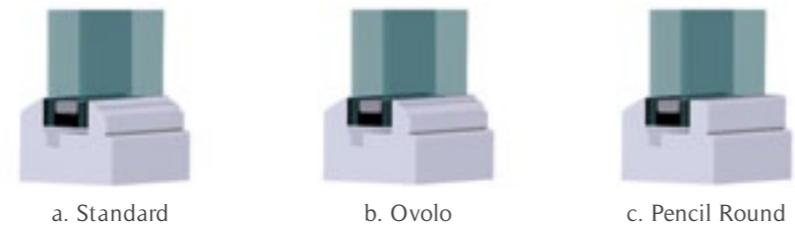


Window Board Groove (WBG):

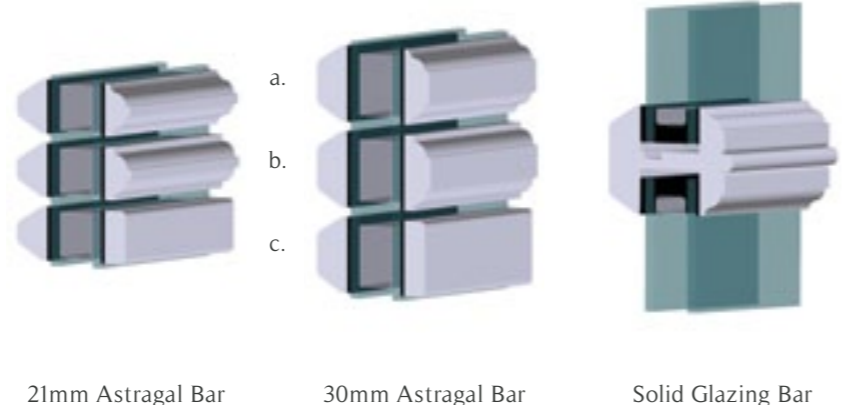
Our windows can be specified with a window board groove. We have the option of no groove, as well as offering a range of window boards.

Glazing Bar & Sash Bar Options

Beading:
Our beads are available as Standard, Ovolo & Pencil Round. All sashes in the traditional range are beaded internally to improve security and weather performance and result in a window with longer life.



Astragal Bars:
This is matched with the outside sash profile and internal glazing bead. They come with an internal glazing bar as standard.

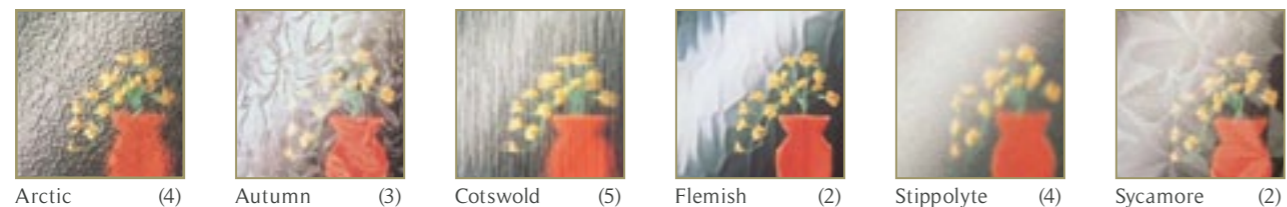


Solid Glazing Bars:
These are available in any layout and are specified at 43mm wide as standard. This can be increased if required.

Glass

We have a wide range of options to suit any special requirements you may have including:

- Toughened Safety Glass:** Toughening process increases strength and safety.
- Laminated Security Glass:** Laminate provides additional security over a toughened unit.
- Acoustic Glass:** Increases already high level of sound insulation using specialist laminates and thicker glass.
- Solar Control Glass:** Allows heat gain from the sun to be matched to the requirements of a building.
- Obscure Glass:** Available in a wide range of patterns, with a sample shown below (the number in brackets indicates the obscurity on a 5 point scale with 5 being the highest). Additional patterns include sandblasted, Oriel and Oriel Textured (a sandblasted pattern on each float of textured glass). Glass can also be painted and tinted. For the full range please visit our website at www.georgebarnsdale.co.uk.



Lead: We offer a wide range of options including widths (6, 9 and 12mm), colours (bright and antique) and styles (including square and diamond patterns).

Stained Glass: We can provide coloured glass to your requirements (a photo of an existing design or a drawing is sufficient). These can be supplied with or without lead outlines.

Other Options: We can install all available glazing systems, so please enquire if you have any special requirements. These may include integral blinds or sandblasted/coloured glass to a specific design (for example, your house number or name).

Timber

Our pivot windows are manufactured from engineered timber from sustainable sources as standard. The timber is approved by either FSC or PEFC bodies and is selected for its outstanding performance and environmental credentials. As standard we use:

- Frames & Sashes:** PEFC Redwood WoodHeart® (timber from the central heartwood of the tree, engineered to be free from knots whilst providing excellent stability and durability).
- Cill Extension:** FSC Hardwood for enhanced durability (the cill extension gets the most weathering).



Redwood WoodHeart®

This coupled with our 4 coat paint system provides a window that shows off the characteristics of the timber and will last indefinitely with minimal maintenance.

We can also offer the window in the following timbers if required (see our company brochure for more information):



Red Grandis

European Oak

Sapele

Accoya

Paint

Our advanced coating system has been developed to provide maximum protection, allow the timber to breathe and let the characteristics of the timber show through. This allows us to give a 10 year guarantee on paint finish (a 25 year guarantee may also be available - please contact us for more information).



Colour: We can provide almost any opaque or translucent colour. All we require is a RAL Standard, RAL Design, Natural Colour System (NCS) or British Standard (BS 4800) colour or an actual sample.

George Barnsdale Standard Colours:

Opaque*				Translucent*			
White RAL 9016	Off White RAL 9001	Cream RAL 1015	Pebble Grey RAL 7032	Light Oak (on WoodHeart®)	Teak (on WoodHeart®)	Mahogany (on WoodHeart®)	Walnut (on WoodHeart®)
Cement Grey RAL 7033	Moss Green RAL 6005	Pastel Blue RAL 5024	Night Blue RAL 5022	Light Oak (on Red Grandis)	Teak (on Red Grandis)	Mahogany (on Red Grandis)	Walnut (on Red Grandis)
Ruby Red RAL 3003	Jet Black RAL 9005			Light Oak (on Sapele)	Teak (on Sapele)	Light Oak (on Oak)	Teak (on Oak)

Dual Colour: We can provide dual colour windows with a different colour inside to out or frame to sash. This also allows for the frame and sash to have a different dual colour specification if required.

*please note that actual colours may vary due to the print process

Guarantees

Our industry leading manufacturer backed guarantees:



Sectional Details/Performance

DESIGN		
	Vertical Section	Horizontal Section
Section Profile		
THERMAL		
U _w (Standard)	1.5 W/m ² K	
U _w (Best)	up to 1.0 W/m ² K	
Energy Rating	up to A	
WEATHER		
Air Permeability	Class 4	
Wind Resistance	Pass	
Water Tightness	Pass	
ACOUSTIC		
Noise Reduction	up to 38dB	
SECURITY		
Can conform to	BS 7950	

Contemporary Window Range

With its modern square edged rebated design, large sash widths (easily accommodating large double and triple glazed units) and advanced ironmongery, the product, with the use of pencil round beading has a very contemporary appearance. This alongside our contemporary handle options, the right paint colour and a contemporary layout (very commonly a large single opening sash) gives a range of options to match into any modern building design.

In addition to product design, timber itself can have a very modern contemporary appearance and is undergoing a renaissance in modern architectural design. Our paint system allows for the features of the timber to remain visible ensuring that it contributes to the design and feel of the building.

See our Contemporary Range brochure for more information.

Wilbraham Hotel, London

A new building designed to look the same as the original, with very strict planning requirements.

Project Details

- Product:** Supertilt sliding sash windows and hexagonal horizontal pivot windows.
- Timber:** Redwood Heartwood®.
- Finishes:** White paint finish.
- Architect:** John R Harris.
- Contractors:** M J Gleeson Group.



Project

The Wilbraham Hotel was rebuilt into 33 luxury serviced apartments in the centre of Chelsea, London. The deluxe interiors are modern and contemporary, while the exterior of the building is very traditional.

As part of the development the aesthetics of the building had to be adhered to, due to very strict planning requirements.

The main requirements of this project were to replicate the original windows and reduce sound transmission.

George Barnsdale & Sons designed and manufactured supertilt sliding sash windows and hexagonal pivot windows to exactly match the originals. All of the windows were glazed with acoustic glass to reduce sound transmission by approximately 37dB and benefitted from the modern performance techniques that are built into every George Barnsdale window.

All sashes are glazed from the inside providing enhanced security and improved weather performance, which as a result gives longer life.

The hexagonal pivot windows move horizontally inwards as do the supertilt sliding sash windows, enabling easy cleaning from the inside.

The windows were manufactured from Redwood WoodHeart® and received a high quality white paint finish using Sikkens. The windows were registered on the Sikkens Sentinel Plus Programme which offers up to 25 years paint manufacturer warranty.

The rear elevation features 'H' reversible windows spanning two floors. The intersection of the floors is glazed with black ceramic coated glass with integral insulation.

All units were supplied and fitted fully factory finished and glazed by Barnsdale Windows.



Balfour Garland Road, Greenwich, London

A major renovation of the Garland Road Health Clinic in Greenwich, London.

Project Details

Product:	Pivot windows.
Timber:	Redwood WoodHeart®.
Finishes:	Teak.
Contractors:	Balfour Beatty Construction Ltd.
Client:	Garland Road Health Clinic.



Project

The renovation of the Garland Road Health Clinic replaces the existing purpose built clinic that was built in the 1940's and is owned by Greenwich PCT. The new clinic will house GPs, health visitors and district nurses as well as podiatry and dental services.

The main requirements of this project were to install contemporary pivot windows to match the modern design of the building.

George Barnsdale & Sons designed, manufactured and installed high quality and long life pivot windows into the building. The windows were pre-glazed with 28mm sealed units comprising of 6mm toughened and 6.4mm softcoat laminated glass, enhancing the strength, safety and security of the window. Excellent security and weather performance is gained by all round multipoint locking which also contributes to the long life of the window.

The windows were manufactured from clear finger jointed Redwood WoodHeart® which is very stable and therefore durable. It is knot and resin pocket free which ensures the coating does not suffer from brown stains and resin breakouts.

This provides the ideal substrate for long term coating performance ensuring that the window will last.

Pivot windows also have the added benefit of being able to be cleaned from the inside as they can fully rotate.

The windows were finished in high quality Sikkens paint and were registered on the Sikkens Sentinel Plus programme which offers up to 25 years paint manufacturer warranty.

The windows were fitted with Hautau ironmongery which enhanced the quality of the window and were installed by Barnsdale Windows.

For more case studies on projects like yours please visit www.georgebarnsdale.co.uk.



About Us

At George Barnsdale, we have been making premium quality timber windows and doors since 1884.

Every window and door is designed, engineered and hand finished in the UK by our team of skilled craftsmen using the finest materials and state of the art robotic machinery.

Our technical team provide expert support and advice to ensure our products meet your aesthetic and performance requirements, enhance UK building regulations and reflect the character of your building.

Investment in research, development and testing has enabled us to achieve the very highest levels in thermal, weatherproof, security and acoustic performance, in a range of products that have been sourced and manufactured in a sustainable way.

Credentials for Lasting Performance

Design:	Internally beaded for security and long life; Double and triple gaskets for class leading weather performance; Traditional designs matching period features with a specialist range for listed buildings (historic range) and modern buildings (contemporary range); Designs fully tested by UKAS approved third party test houses.
Timber:	Use of high quality engineered timber providing excellent durability and stability characteristics; Range of redwoods and hardwoods available; All timber sourced sustainably through either FSC or PEFC certification schemes.
Paint:	Cutting edge robotic paint facility allowing precise control of paint application; advanced coating system providing excellent protection, whilst allowing the characteristics of the timber to remain visible; 10 year guarantee with no redecorating required available on most products (7 years for stain finish).
Glass:	High performance glazing with Saint Gobain Planitherm Total+, argon fill and warm edge spacer as standard; Many options including security, safety, acoustic, thermal, solar gain/reduction, obscure patterns, slim units (including Pilkington Legacy and Histoglass); Triple glazed units fit into all traditional and contemporary products; Internally beaded, drained and vented glazing systems for improved performance and life; All units tested to BS EN 1279 and supplied with a 10 year warranty (except some slim unit options).
Fittings:	High quality fittings used as standard; Wide range of colour and style options; Products meet BS 7950 / PAS 23/24 requirements where applicable; All fittings covered by 5 year guarantee.
Thermal:	Optimised designs through thermal modelling by in-house BFRC simulator; Products can meet an A rating; First A rated timber window in UK; Window U-value and Window Energy Rating displayed on all quotations; Window U values less than 1 W/m ² K available on most products; Passivhaus window option now available.
Wind/Water:	Double/triple seals around the window provide excellent sealing from weather; Investment in research, development and testing have optimised designs and extensive test data is available to validate performance.
Acoustic:	Draught seals and advanced glazing provides excellent noise reduction as standard. Our acoustic glass range can provide further improvements if required (a range of test data in accordance with BS EN ISO 717-1 is available).
Security:	High security fittings supplied as standard; Increased security specification is available if required; Windows can be manufactured to achieve BS EN ISO 7950 (requirement for Secure by Design) if required; Doors can be manufactured to PAS 23/24 if required.

Certifications and Standards



The mark of responsible forestry



GEORGE BARNSDALE

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