Designed to be beautiful, functional and versatile.

Standard
PATENT GLAZING
ESTABLISHED 1902

Rafterline Patent Glazing Systems



t: 01924 461 213
e: www.patent-glazing.com

Designed for beauty.

Non-structural functional, beautiful

Our non-structural Rafterline Patent Glazing System brings a blend of functionality and beauty making it the ideal choice for a wide range of architectural styles in modern residential and commercial construction.

Designed for commercial and residential applications, the system is supported by existing timber rafters or those supplied and installed by other trades.

Offering external capping options, this system allows for multiple glazing configurations and is ideal for double and triple glazed rooflights, providing superior insulation and energy efficiency.

Despite its affordability, it delivers a perfect balance of aesthetics, durability, and performance.

This makes it an excellent choice for budget-conscious projects. Its sleek profile and adaptability make it a preferred solution for architects and designers. It also supports single-glazed canopies, adding to its versatility.

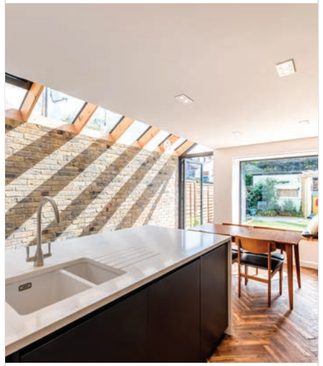
It can accept glazed infill thicknesses from 6mm up to 54mm.



Timber rafters, supplied by the builder or joinery subcontractor, enhance interior aesthetics, while our externally clad system ensures complete weather protection. This eliminates the need for regular maintenance, a common issue with traditional timber glazing.

The combination of aluminium and timber makes our Rafterline Patent Glazing System a top choice for domestic projects. Aluminium's durability blends seamlessly with timber's natural warmth, creating a visually appealing and long-lasting solution.

Offering functionality, beauty, and minimal maintenance, the system is an ideal choice for modern architectural designs, ensuring long-term performance and aesthetic appeal.



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Exceptional versatility, with wide ranging options



Our non-structural Rafterline Patent Glazing System is designed with exceptional versatility with the option of being raised or in-line with the supporting rafter structure, accommodating a wide range of configurations for single, double, and triple glazing applications.

The system can be seamlessly installed into various roof structures, including mono-pitched, duo-pitched, valleys, hips, tiers, vertical, in-line, raised, northlight, and canopy designs.

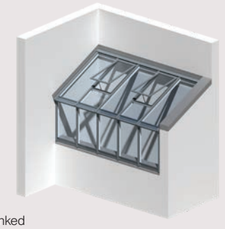
Whether for residential or commercial projects, the system's adaptability ensures it meets diverse architectural requirements. The possibilities are endless, making our Rafterline glazing system the perfect solution for innovative and functional glazing designs.



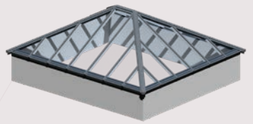
Here are some of the configurations we offer:



Canopy



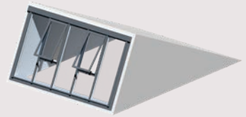
Cranked



Hipped and ridge



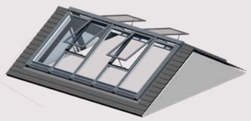
Mono-pitched to wall



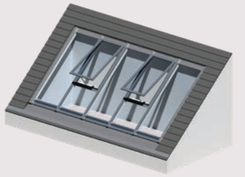
Northlight



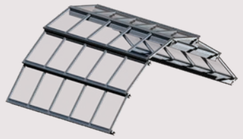
Raised above



Ridgelight



Slate roof in-line



Tiered



Valley

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Engineered for strength, efficiency, and compliance

The Rafterline Patent Glazing System is a non-structural patent glazing solution designed for timber rafter support, offering high performance, durability, and aesthetic appeal across various applications.

Key technical advantages

- **Unlimited spans**
  Accommodates large-scale roof glazing without structural constraints.
- **Concealed fixings**
  Ensures a clean, seamless aesthetic with secure installation.
- **'L' Reg compliant**
  Meets Building Regulations Part L for thermal efficiency.
- **Thermally boken**
  Reduces heat loss, improving insulation and energy efficiency.
- **Opening vent compatibility**
  Allows natural ventilation while maintaining a sleek design.
- **Versatile applications**
  Ideal for rooflights, canopies, pergolas, and loggias.
- **Popular for domestic projects**
  Combines modern aesthetics with low maintenance.



Conformity to industry standards

Tested to BS 5516 for sloped glazing, the system can meet CWCT TN66 & TN67 non-fragility standards when combined with suitable rafters and BS 6375-1 for weather performance, ensuring safety, durability, and environmental resistance when incorporating an inner pane of 1-B-1 laminated glass in accordance with BS EN 12600.

Technical considerations

Precision is crucial in timber rafter installation—misalignment may require on-site templating or shaped glass. Close coordination between glazing installers and joinery subcontractors is essential.

Cost-effective without compromise

Despite its affordability, it delivers premium performance, strength, and durability, offering an ideal balance of cost, efficiency, and aesthetics for budget-conscious projects.

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Span chart

Due to the Rafterline Patent Glazing System being non-structural the glazing bars' strength is provided by others structural timber rafters and the maximum span of this system is therefore only limited by the integrity of the structural rafters.

The glazing bar extrusions and cappings can be supplied in unbroken lengths up to 7000mm but can also be joined to create even longer downslope lengths.

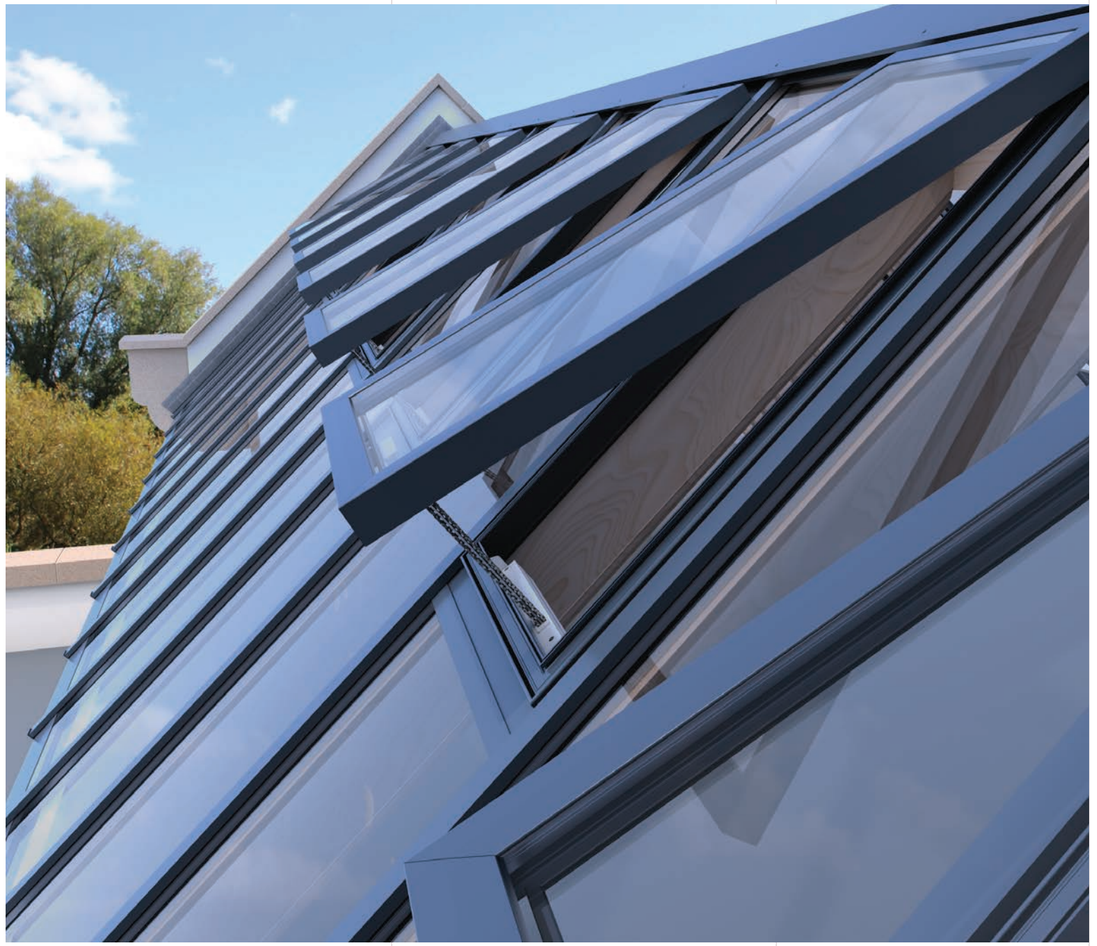
Advantages

- Unlimited spans achievable.
- Concealed capping fixings.
- 'L' Reg compliant.
- Thermally broken.
- Suitable for accepting opening vents.
- Very popular on domestic projects.
- Suitable for canopies/loggias/pergolas.
- Single, double or triple glazed option.

Considerations

Accuracy required from joiner in rafter installation. If rafters are installed out of square then on-site templating and/or shaped glass may be necessary to rectify joiners errors.





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Technical drawing

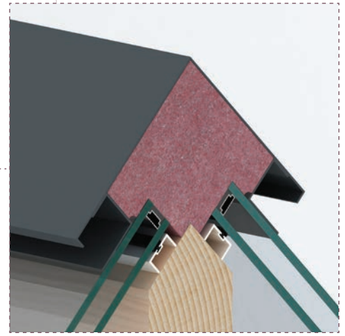
This CGI render showcases a 3D technical drawing of our Rafterline Patent Glazing System in a duo-pitched configuration with double glazing.

It highlights key interface details, including the eaves, intermediate joints (for spans over 3150mm), ridge, and verge connections.

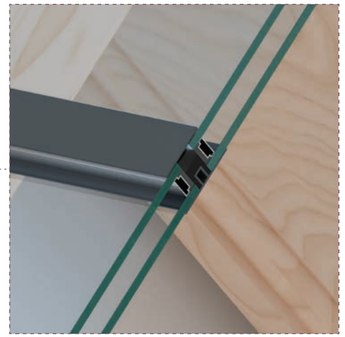
This visualisation provides a clear representation of the system's structural integration and performance.

For additional 2D, 3D & NBS H10 Specification assets, visit our download centre.



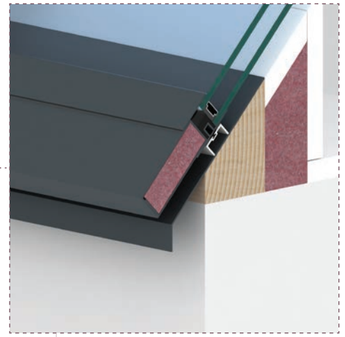


Ridge



Intermediate

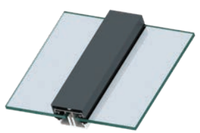
Eaves



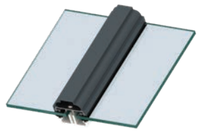
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Glazing bar configurations

The Rafterline range can accommodate glazed infills from 6mm to 54mm.

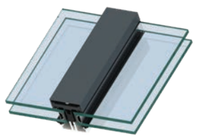


RSA-AAA-AA1

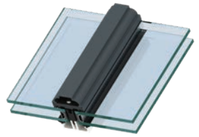


RSA-AAA-AA2

Rafterline SPG 1 type polyester powder coated aluminium glazing bar with PC2 & PC3 cosmetic cappings—single glazed.

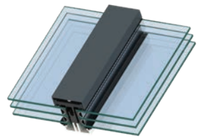


RDA-AAA-AA1

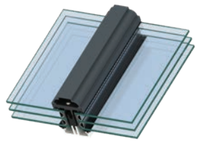


RDA-AAA-AA2

Thermally Broken Rafterline SPG 1 type polyester powder coated aluminium glazing bar with PC2 & PC3 cosmetic cappings—double glazed.



RTA-AAA-AA1



RTA-AAA-AA2

Thermally Broken Rafterline SPG 1 type polyester powder coted aluminium glazing bar with PC2 & PC3 cosmetic cappings—triple glazed.

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A guide to glass

Our glazing systems incorporate advanced glass technologies designed for safety, energy efficiency, and aesthetic appeal.

- **Safety and structural integrity**
  All systems use approved safety glass or polycarbonate infill. For double and triple glazed units, toughened outer panes paired with laminated inner panes prevent dangerous breakages.
- **Solar control**
  Solar control glasses effectively reduce heat gain through roof glazing, enhancing comfort and energy performance.
- **Translucent glass**
  This option maximises natural light while obscuring vision for privacy. Our Diffussa laminated glass—with a white, translucent PVB interlayer—also minimises glare.
- **Self-cleaning options**
  Invented by Pilkington, self-cleaning glass is ideal for hard-to-reach areas. Both hard coat and soft coat variants are available, ensuring low maintenance over time.
- **Patterned and textured glass**
  Textured glass features an embossed design that decorates while allowing light diffusion and controlled obscuration.
- **Wired glass alternatives**
  Ideal for conservation projects

  Georgian Wired glass, commonly known as Pyroshield glass, is available in a textured finish for added obscurity, however this glass no longer meets the safety classification requirements of BS EN 12600. For conservation projects, seeking a similar aesthetic with enhanced safety, there are several alternative glass types that replicate the appearance of Georgian Wired while providing a safety classification in accordance with BS EN 12600.

  This is achieved through advanced techniques such as digitally printing on heat-treated glass or incorporating printed PVB or SGP interlayers in laminated glass. This method not only replicates the classic wired design but also significantly improves safety, ensuring a non-fragile assembly in compliance with CWCT TN66 & 67 when used in our glazing systems.
- **Vacuum sealed units**
  Ideal for conservation projects

  Vacuum glazing (VG) delivers exceptional thermal insulation with ultra-thin, lightweight panels. Achieving centre pane U-values as low as 0.4W/m²K (and G values down to 0.32 with solar control), it's ideal for conservation projects and energy-efficient applications.

Safety standards compliance

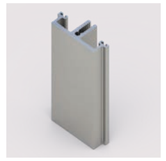
Our patent glazing systems meet stringent non-fragility standards (ACR[M]001:2014 and CWCT TN67), underlining our commitment to public safety.

Stay informed

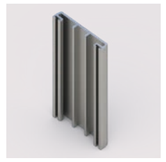
As glass technology continues to evolve, please scan the QR code for the most current product information.

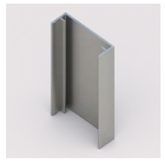
Component list

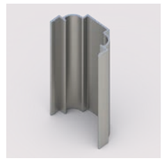
Glazing bars


SPG1

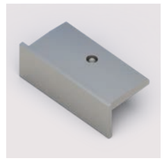
Cappings

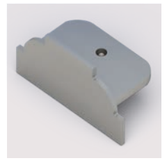

PC1


PC2


PC3

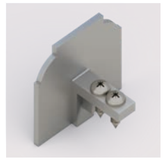

PC5

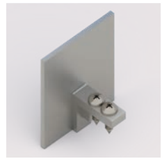

PC2 CAP

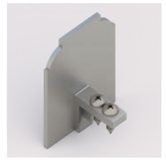

PC3 CAP

End stops

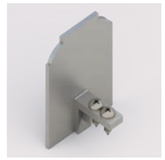

CS1

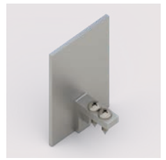

CS3


CS4


CS5


CS6

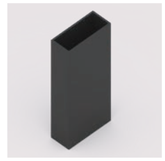

CS7

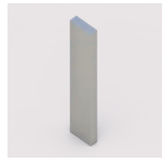

CS8


CS9

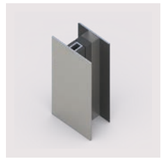
End bar packs

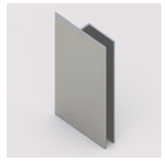

EP1

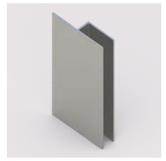

EP2


EPS3

Glass abutment joints


JS2


JS3


JS4

Gaskets


AB635 B

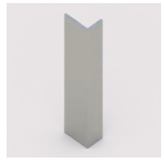

AE065 B

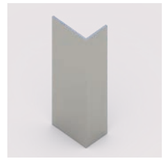
Thermal breaks

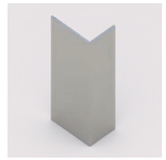

TB33 B

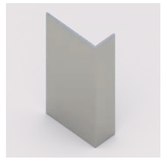

TB23 v3 B

Glass edge protectors

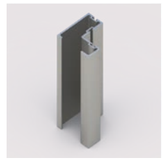

GEP1

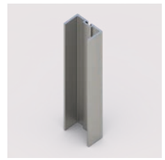

GEP3


GEP4


GEP5

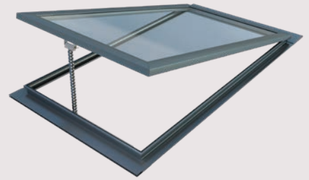
Weather bars


WB1

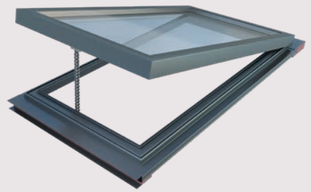

WB2

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Opening ventilators



Single glazed opening vent



Double & triple glazed opening

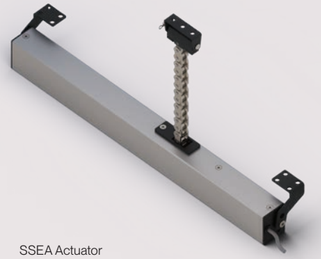
Gearing



Screwjack



SPG45



SSEA Actuator



SSEA Double Actuator

Protective finishes

The most popular way to protect our aluminium sections from oxidisation and create an appealing aesthetic look is to apply a polyester powder coated finish.

This is a high quality finish and will perform admirably for decades as long as a regular cleaning schedule is maintained.

All of our aluminium glazing systems are coated after full manufacture and our prices include your choice of one colour from the array of standard colours available in the table shown here.

If you require a different colour, we can source it at an additional cost, including special finishes such as metallic and pearlescent textures.

Dual colour projects

We are able to offer most of our glazing systems in a dual colour format. Domestic customers regularly desire a white or other light colour internally to blend in with the internal decoration of the room whereas a darker colour, usually one of the many grey shades or black is chosen for the external colour finish. Dual colour specifications carry an administration charge.

Other protective finishes

Anodising also a popular solution and is available upon request. Anodising enhances aluminium's natural properties, making it very durable, corrosion-resistant, and aesthetically appealing.

Glazing module sizes

Key

- Readily available
- Mechanical lifting equipment required
- Span Restrictions
- ▶ Over 3150 joint or break detail required

Our standard colours

9005	Jet black
9010	Pure white

Our popular colours

7015	Slate grey

1001	Beige
1013	Oyster white
1014	Ivory
1015	Light ivory
1018	Zinc yellow
1019	Grey beige

3003	Ruby red
3004	Purple red
3005	Wine red
3009	Oxide red
5000	Violet blue
5002	Ultramarine blue

5003	Sapphire blue
5004	Black blue
5008	Grey blue
5010	Gentian blue
5011	Steel blue
5012	Light blue

5013	Cobalt blue
5014	Pigeon blue
5015	Sky blue
5017	Traffic blue
6002	Leaf green
6005	Moss green

6006	Grey olive
6009	Fir green
6016	Turquoise green
6018	Yellow green
6019	Pastel green
6027	Light green

7001	Silver grey
7004	Signal grey
7005	Mouse grey
7011	Iron grey
7012	Basalt grey
7015	Slate grey

7016	Anthracite grey
7021	Black grey
7022	Umbra grey
7024	Graphite grey
7030	Stone grey
7031	Blue grey

7032	Pebble grey
7035	Light grey
7037	Dusty grey
7038	Agate grey
7040	Window grey
7042	Traffic grey A

7043	Traffic grey B
7044	Silk grey
8011	Nut brown
8014	Sepia brown
8015	Chestnut brown
8017	Chocolate brown

8019	Grey brown
9001	Cream
9002	Grey white
9005	Jet black
9010	Pure white
9016	Traffic white

mm	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1050	1200	1250
1000																	
1250																	
1500																	
1750																	
2000																	
2250																	
2500																	
2750																	
3000																	
3150																	

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Exceptional performance for years to come

We take our responsibility to adhere to the highest regulatory and quality standards seriously. Our commitment to British Standards and industry regulations ensures that every project we undertake is safe, compliant, and built to last.

For over a century, we have been at the forefront of setting and maintaining these standards within the patent glazing industry, helping to shape the future of roofing and glazing practices across the UK.

Our systems, from design to installation, meet or exceed the requirements set forth in British Standard BS 5516, which governs the design and installation of sloping and vertical patent glazing.

This standard addresses key areas such as structural integrity, weatherproofing, safety, and thermal performance.

By adhering to these rigorous guidelines, we ensure that our glazing systems not only provide outstanding aesthetic and functional value but also offer long-term durability and compliance with all relevant building regulations.

BS 5516: Leading the way in patent glazing standards

The BS 5516 British Standard for patent glazing is an integral part of our design and manufacturing processes.

This code of practice outlines critical requirements for ensuring that sloping and vertical patent glazing systems can withstand the environmental and structural demands of modern buildings.

Our team of experts has been closely involved in the development and continuous improvement of these standards, demonstrating our commitment to quality, innovation, and safety.

Design and safety

BS 6262-4 Glazing for buildings. Safety related to human impact.

BS EN 1991-1 Loading for buildings. Code of practice for dead and imposed loads.

BS EN 1991-1-4 Loading for buildings. Code of practice for wind loads.

BS EN 1999-1 Structural use of aluminium. Code of practice for design.

BS EN 12056-3 Gravity drainage systems inside buildings, roof drainage, layout and calculation.

BS EN 14024 Metal profiles with Thermal Barriers. Mechanical Performance, proof, tests and requirements.

Thermal and quality

BS EN ISO 10077-1 Thermal transmittance and performance calculation of windows, doors and shutters, part 1.

BS EN ISO 10077-2 Thermal transmittance and performance calculation of windows, doors and shutters, part 2.

BS EN ISO 12567-1 Determination of thermal transmittance using hot box method, Part 1.

BS 8000-0 Workmanship on building sites. Code of practice for glazing.

BS EN ISO 9001 Quality management systems – Requirements.

Finishes

BS 3987 Specification for anodic oxidation coatings.

BS 4842 Specification for liquid organic coatings.

BS 6496 Specification for powder organic coatings.

BS EN 12206-1 Paints and Varnishes.

BS EN 12373-2 Aluminium and aluminium alloys

BS EN 1774 Zinc and zinc alloys.

BS EN 10268 Cold-rolled flat products.

BS EN 12844 Zinc and zinc alloys.

BS7371 Mechanical properties of corrosion-resistant stainless-steel fasteners.

BS 3382 (various) Specification for electroplated coatings.

BS 6338 Specification for chromate conversion coatings.

BS EN ISO 1461 Hot dip galvanized coatings.

PD 6484 Commentary on corrosion.

This is only a selection of standards. For a fully comprehensive list of the British Standards and BS EN standards that our glazing systems comply with, please visit our website.

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Maintaining exceptional quality



Committed to excellence

We continuously improve our processes and embrace the latest technologies to ensure our glazing solutions are innovative and dependable. By completing every task with precision and care, we deliver defect-free products that perform perfectly from the start.

Our client's satisfaction is our priority. Our dedicated team works closely with customers and specifiers to provide solutions tailored to your specific needs, ensuring that every project runs smoothly and successfully.

The trusted partner for daylighting solutions

We understand that our customers need glazing systems that meet high standards while delivering reliable, long-term performance. By strictly adhering to British Standards, we ensure our products and services comply with regulations and exceed expectations.

We provide a comprehensive, turnkey solution, delivered by our team of directly employed experts. From design to installation, every stage of your project is handled by skilled professionals, ensuring consistency, quality, and a seamless experience.

Weather resistance

Our roof glazing systems are essentially capable of being glazed without a pitch at all. However we don't recommend installing roof glazing at very low pitches for a number of reasons.

Firstly the rainwater will not disperse effectively from the glass from the glass leaving unsightly tide marking.

If the rainwater is not able to shed naturally from the glass due to an insufficient slope within the design then it will dissipate through evaporation.

Dust in the air will be caught by the raindrops and the evaporation of the water will leave a series of 'water marks' on the glass which will build up over time. This again is not a problem if the roof glazing is subject to a regular cleaning schedule. Please do ensure that if you are designing roof glazing with a very shallow pitch that there is easy access to the roof glazing to allow for cleaning on a regular basis. If this isn't carried out then it won't be long before not just water marks are on the glass but a full garden beginning to take root!

Opening vents and low pitched roof glazing

Both our roof glazing systems and opening vents are capable of performing at pitches as low as 5°. However, we strongly recommend incorporating a minimum pitch of 15° into the design if regular cleaning and maintenance cannot be guaranteed.

At pitches below 15°, rainwater may not fully drain from the glazing surface or framework, leading to standing water. While this does not compromise the watertight integrity of the system, prolonged exposure to ponding especially during colder, wetter months can result in unsightly tide marks from drying water and environmental debris, and may cause premature deterioration of seals over time.

To preserve both the aesthetic quality and long-term performance of the system, a steeper pitch should be considered where ongoing maintenance is unlikely.

Maintenance

Periodic cleaning of the glazing to remove dirt and the build up of debris will be required to keep the glazing system in a good order and to avoid the loss of light transmission from the glass. Certain glass products can be subjected to thermal stresses if the panes are left unclean for prolonged periods of time.

Aluminium sections with powder coated or anodised finishes must also be cleaned regularly to conform to the terms of guarantee.

For more information on cleaning and maintenance please visit our website, where you can download and refer to our manual.

Health and safety

We are deeply committed to health and safety. All of our employees are fully aware of their responsibilities in this regard and our relevant staff hold the necessary qualifications for their roles. These include NEBOSH, IOSH, SSSTS, SMSTS, CSCS, PTS, PAL-IPAF, First Aid, and PASMA certifications.

Our commitment to health and safety standards extends to continuous professional development through our ongoing CPD programme. Employees regularly attend training courses aligned with their individual development plans, ensuring they remain current with industry standards and practices. Our in-house health and safety practitioners, along with our management and consultants, conduct regular Tool Box talks and implement our annual 'Safety Action Improvement Plan.' This approach maintains an unbroken cycle of dedication to health and safety, reinforcing our promise to uphold the highest standards in all our operations.



"The commitment to Health and Safety has been underpinned by the company's efforts on training across the workforce. This has included CITB, CSCS and First Aid. We are understandably very proud to have been the company awarded with the prestigious title 'Best Health and Safety Performance'."

Award for Best Safety Performance for Less than 50 employees

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A unique service

We offer full design, manufacturing and installation facilities which are all in-house.

We do not sub-contract any of our design work or installations to other companies thus ensuring that all our projects are dealt with by experts with a full knowledge of all of our complete range of glazing systems.

Condition survey

Our service offers an in-depth, on-site evaluation of your existing roof glazing. We produce a detailed report that identifies any issues, recommends targeted remedial strategies, and ensures all compliance requirements are outlined within our recommendations. Our report also details expert advice on scaffolding, hoisting, and interface requirements. Additionally, we provide a clear budget quotation for the proposed solutions.

Design and logistics survey

Once we have been appointed, we offer a comprehensive on-site design and logistics survey for the roof glazing package, culminating in a detailed report that not only captures precise design dimensions but also offers expert advice on scaffolding, hoisting, and interface requirements.

Additionally, for clients confident in obtaining accurate measurements independently, we offer a cost-effective desktop survey option, ensuring that every project receives the tailored attention it deserves.

Design

We have been designing Patent Glazing systems for over a hundred years and we would like to think that our systems are the best available anywhere.

The continued improvement of our glazing sections throughout the decades ensures that our products are built to last, fully watertight, robust and designed to meet all current regulations and best practice.

Our Technical Directors throughout our history have also been contributors to the British Standard for Patent Glazing, BS5516. We have the knowledge and expertise to be involved in any patent glazing project in the UK.

Manufacture

Since 1918, we have been manufacturing patent glazing systems at our factory located on Forge Lane, Dewsbury.

Since moving into this purpose built facility, it has undergone several expansions and now covers an area of 2600m².

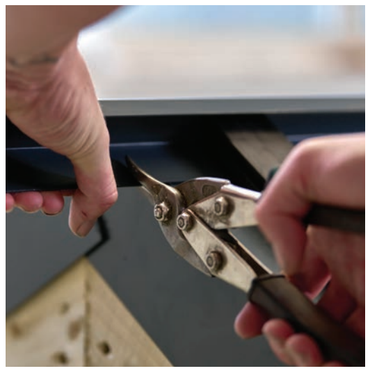
We utilise a combination of state-of-the-art machinery and original Victorian equipment to produce our distinctive Heritage lead-covered steel glazing bars, ensuring both innovation and tradition in our manufacturing process.

Installation

Our highly experienced and directly employed installation staff have installed millions of square metres of Patent Glazing throughout the decades and examples of our finished work can be seen on many of today's prestigious buildings, railway stations and shopping centres.

All of our current installation teams are long serving members of our organisation and fully qualified to carry out the most demanding of projects.

We have successfully carried out over 40,000m² of patent glazing to railway stations alone in recent times and our installers and contracts team hold all the relevant qualifications such as NEBOSH, IOSH, PTS, PAL-IPAF, First Aid, Erection of Mobile Tower Scaffolding and CSCS, of which we hold a Gold Standard certificate.

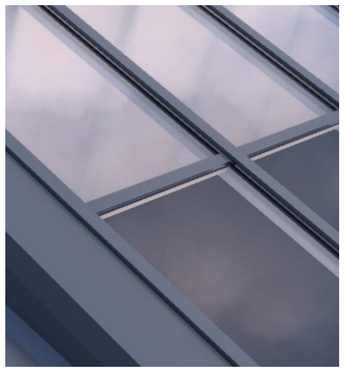


Guarantee

When our highly skilled employees install your project, it comes with a comprehensive five-year 'end-to-end' guarantee against defective workmanship. For added assurance, we can also provide extended guarantees for an additional fee.

With over a century of existence, we've supplied guarantees for tens of thousands of projects, ensuring client satisfaction and peace of mind.

Unlike many in the industry, we do not employ subcontract labour for any of our activities. This commitment to in-house expertise adds an extra layer of accountability and comfort, truly encompassing our 'end-to-end' guarantee.



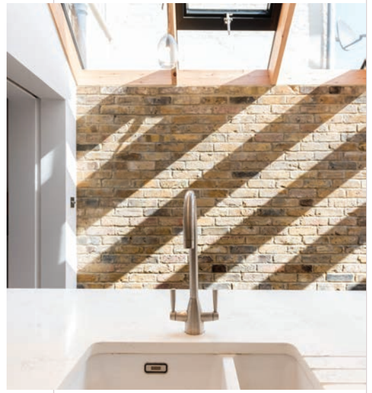
This track record is evidence that when you specify 'Standard', you are choosing satisfaction and reassurance.

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Case study

Domestic Property

New mono-pitched roof glazing to kitchen extension, London



Project overview

We successfully implemented our proprietary Rafterline Patent Glazing System for a mono-pitched roof in a side return kitchen extension project. This system was chosen to integrate seamlessly with the client's vision of blending timber rafters internally with a robust and sleek external glazing solution.

Benefits

The system incorporated double glazed units, ensuring thermal compliance and providing abundant natural daylight into the highly specified kitchen extension. To enhance ease of maintenance, the double glazed units were equipped with a self-cleaning application, reducing upkeep demands and maintaining clarity over time.

Main Contractor:

The Standard Patent Glazing Co Ltd

Architect:

N/A





Additional features

In addition to the 12m² of roof glazing, we supplied verge flashings for the pitched slate roof. These flashings facilitated a seamless gable termination between the roof glazing and the adjoining slate roof, enhancing both aesthetic continuity and weatherproofing.

Expert delivery

We demonstrated expertise throughout the project, from design through to installation. Their meticulous approach ensured that the system not only met but exceeded the client's expectations for functionality and aesthetics. The result was a kitchen extension flooded with natural light and a visually striking roofline that complemented the overall architectural design.

This case study showcases how we leveraged the Rafterline Patent Glazing System to deliver a tailored solution that enhanced both the functionality and visual appeal of a mono-pitched roof in a kitchen extension project.

"We chose Standard Patent Glazing Co Ltd for our kitchen extension project based on their Rafterline Patent Glazing System, and we couldn't be happier with the results. The system they installed not only floods our kitchen with natural daylight but also maintains thermal efficiency, which was crucial for us.

The decision to apply a self-cleaning application to the double glazed units has been a game-changer in terms of maintenance. It's reassuring to know that our glazing will remain clear and vibrant with minimal effort on our part.

As homeowners, we felt confident in specifying them because of their established reputation and commitment to quality. Knowing they do not employ subcontractors and take full responsibility from design through to installation and the guarantee period gave us peace of mind.

They handled everything seamlessly, including providing verge flashings that ensured a perfect transition between the roof glazing and our existing slate roof. Their attention to detail and commitment to delivering a robust and sleek external appearance, while preserving the soft touches of timber rafters internally, exceeded our expectations.

Overall, we are thrilled with the system and grateful for the expertise and professionalism of them.

They made the process easy and delivered a result that enhances both the functionality and aesthetic of our home."

Home owner

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The Orangery, Ingestre

Roof glazing replacement at The Orangery, Ingestre, Staffordshire



The 18th century Orangery, once a symbol of elegance and charm, had fallen into disrepair. Thanks to lottery heritage funding and the relentless efforts of the 'Friends of Ingestre Orangery,' a registered charity with the sole purpose of revitalizing this Grade II-listed Staffordshire building, a remarkable transformation was on the horizon.

A new lease of life

Through a strategic blend of re-appropriation and extension, the Orangery was reborn, embracing a sustainable role as a gallery and venue space. This allowed its rich heritage to be experienced and cherished by the community once more. The resurrection of this architectural gem would not have been possible without the dedication of many.

Our task: preserving the past and the future

Our task in this ambitious endeavour was to replace the aging roof patent Orangery glazing with a modern yet thermally efficient non-structural Rafterline Patent Glazing System.

We incorporated our ornate PC3 cosmetic cap into the design, infusing the glazing system with a heritage feel that paid homage to the building's rich history.

The Rafterline Patent Glazing Bars found their place fixed to meticulously restored ornate moulded timber rafters, a labour of love undertaken by H.A Briddon Ltd. To ensure the Orangery glazing remained weatherproof, we installed lead sheet weathering flashings around the perimeter and ridge positions. In addition, we added double-pane wide opening ventilators, providing much-needed natural ventilation to the multi-use internal space.

A sustainable and safe future

This thermal efficient solution was carefully designed to reduce solar heat gain, ensuring sustainability for the future. The outer pane of Toughened Pilkington Activ Neutral not only offers solar reduction, It also offers a low maintenance solution by incorporating self-cleaning properties.

For safety, the inner pane of laminated safety glass was incorporated, ensuring that the double-glazed units would remain secure within the glazing system in the event of breakage, enhancing the overall safety of the building.

Choosing robustness and longevity

While several non-structural glazing systems were available on the market, our Rafterline Patent Glazing System stood out due to its renowned robustness and long service life. This choice was a testament to our commitment to quality and durability.

Precision in every detail

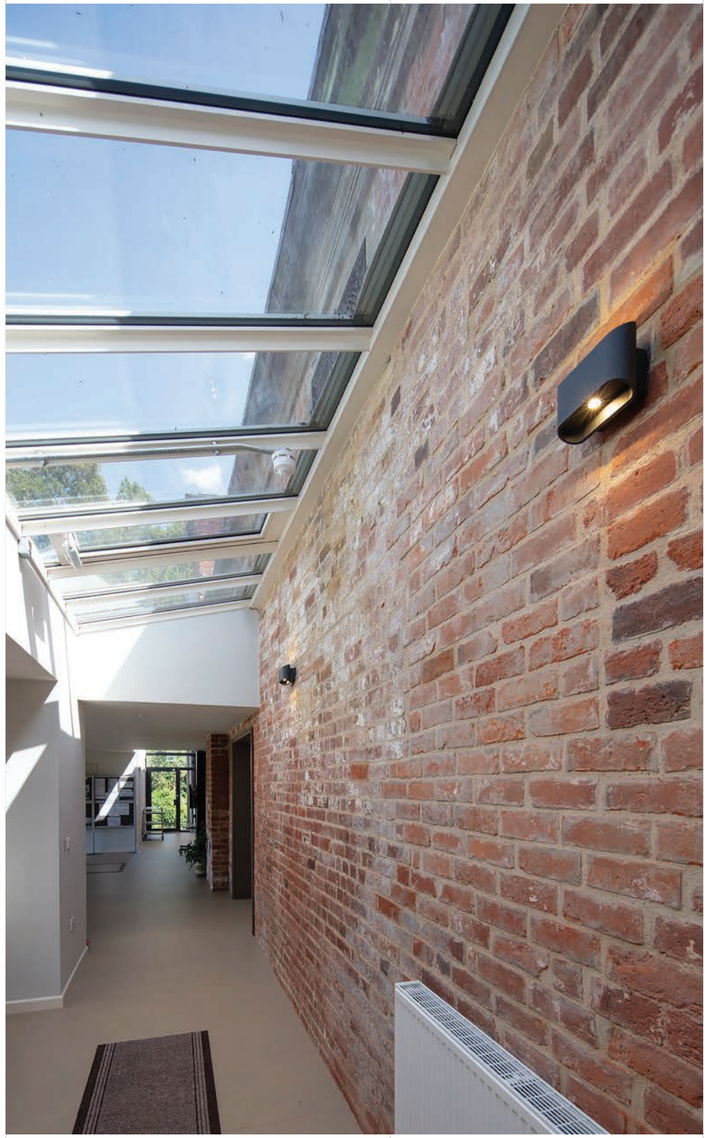
Installing the new system to the existing rafters was no small feat. With no room for error in the sleek rafter design, meticulous surveying of the timber roof structure was imperative. Our expert design and survey teams left no margin for error, ensuring an accurate installation that seamlessly blended the old with the new.

Main Contractor:

H.A. Briddon Ltd

Architect:

PCPT Architects Ltd



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"The Ingestre Orangery project, a remarkable transformation of an 18th century Grade II-listed building, was a testament to the dedication and collaborative effort of various stakeholders.

They played a vital part in preserving the past while embracing the future. They successfully replaced the aging roof patent glazing with a modern and thermally efficient non-structural Rafterline Patent Glazing System. Our chosen system highlighted our commitment to quality, robustness, and durability.

The meticulous surveying and precision during installation seamlessly blended the old with the new, creating a fusion of heritage and modernity that allows the Ingestre Orangery to shine brightly once more.

We have entrusted Standard Patent Glazing Co Ltd to deliver several roof glazing projects over the years and will continue to do so due to their expertise, professionalism and positive approach to complex projects."

Harry Briddon
Director at H.A. Briddon Ltd



Result: a fusion of heritage and modernity

The Ingestre Orangery now stands as a symbol of the harmonious coexistence of history and modernity. The transformation of this architectural gem, infused with contemporary functionality, offers a new lease on life for the Orangery, allowing its heritage to shine brightly once more.

This case study underscores our commitment to preserving the past while embracing the future, ensuring that architectural treasures continue to inspire and serve communities for generations to come.

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The Glasshouse



Roof and vertical glazing transformation at The Glasshouse, Syrencot House, Salisbury



A historic revival

Situated in the picturesque riverside grounds south of Ablington, near the southern reaches of the parish, Syrencot House stands as a three-story country house with a storied past. Constructed in 1738 on the foundations of an earlier dwelling, the house was later expanded in the early 19th century with the addition of a substantial two-story wing. It was during this period that a magnificent glasshouse was introduced into the estate.

In 2019, the estate changed hands, falling under the ownership of a venue services company with a vision. They set about the remarkable transformation of the somewhat timeworn estate into a venue for weddings and accommodations. Amidst this renaissance, the once-dilapidated glasshouse was reborn with a radiant facelift, its glass-clad exterior and elegant ceiling drapes breathing new life into its essence.

Main Contractor:

H Sweet & Sons Ltd

Architect:

Lewandowski Architects

Where nature and elegance converge

The Glasshouse, with its fully glazed exterior, offers an enchanting setting for under-cover ceremonies. It's a space that gracefully marries the outdoors with the indoors, providing an ethereal atmosphere for special occasions.





Making dreams real

To bring this vision to life, we deployed our Rafterline Patent Glazing System, a testament to its versatility. The system incorporated clear double glazed units, which included laminated glass to ensure the retention of the double glazed units in case of breakage.

While our glazing systems are typically synonymous with roof applications, the adaptability of the system shone through. Here, it seamlessly became part of the vertical façade, flooding the space with an abundance of natural daylight to create the perfect backdrop for weddings and events.

The complexity of design: a showcase of expertise

The complex design, with its vertical, ridge, hip, and valley interfaces, served as a showcase of our capabilities and expertise. Our ability to deliver multifaceted daylighting solutions was evident in every facet of this project. By directly employing experts throughout our operations, we ensured an end-to-end solution, where precision met creativity.

Result: a Glasshouse reborn

The Glasshouse at Syrencot House, Salisbury, stands as a testament to historic preservation and contemporary innovation. Its transformation is a testament to the enduring allure of architectural reinvention and the power of natural light.

This case study highlights our commitment to reimagining spaces, ensuring that the past and present can harmoniously coexist while basking in the brilliance of daylight. The Glasshouse is a symbol of grace and sophistication, and its legacy will continue to shine for generations to come.

"The transformation of Syrencot House's Glasshouse at Salisbury has been a remarkable journey, and the collaboration with Standard Patent Glazing Co Ltd has been an essential part of this project's success.

Their expertise and dedication were evident throughout, from the revival of a once-dilapidated space to the creation of a breathtaking venue for weddings and events.

The Rafterline Patent Glazing System, adapted to the vertical façade, seamlessly integrated with the design, flooding the space with natural daylight.

The complexity of the project's design, with its intricate interfaces, truly showcased their capabilities and expertise.

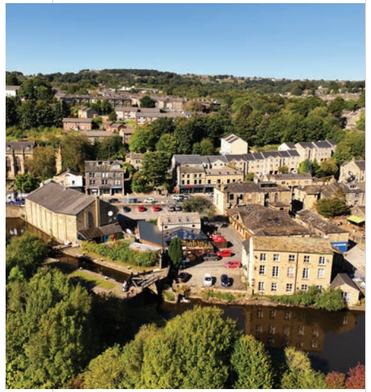
We appreciate their commitment to reimagining spaces and preserving history, and we are thrilled with the Glasshouse's transformation, which will continue to shine for generations."

Juliane Paetz
General Manager at Syrencot House

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Hogs Head Brew House

Installation of the Rafterline Patent Glazing System at Hogs Head Brew House, Sowerby Bridge



Project overview

The proprietor of Hogs Head Brew House engaged us with a simple design brief. 'I would like to recreate a shopping arcade glazed roof structure I have seen in Halifax to accommodate customers in my new extension.'

Following this brief, we collaborated closely with the client and the steel contractor, Broadcliffe Fabrications Ltd, to bring the vision to reality. Once the concept was approved, we specified our Rafterline Patent Glazing System to integrate seamlessly with the steel rafter and hip frames designed by Broadcliffe Fabrications Ltd.

The structural steel design was complex due to the need to abut several existing buildings while incorporating hips and ridges to connect the extension. However, Broadcliffe Fabrications Ltd installed the structure with precision, and when we attended to survey the completed framework, the installation was seamless.

Main Contractor:

The Standard Patent Glazing Co Ltd

Architect:

n/a



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Design considerations and performance

The primary design objective was to maximise light transmission while mitigating solar heat gain. To achieve this, we specified a double-glazed unit configuration featuring:

- **6mm SKN 176ii Solar-Controlled Toughened Outer Panes**
  These provide a centre pane U-value of 1.0 W/m²K, a light transmission rate of 70%, and a solar G value of 0.37.
- **Comparative performance**
  Standard clear double-glazed units typically offer a centre pane U-value of 1.15 W/m²K, a light transmission of 78%, and a solar G value of 0.69. While the light transmission is reduced by just 8%, the solar gain is reduced by an impressive 46%, ensuring enhanced occupant comfort and reduced solar overheating.

To further enhance safety and ensure compliance with British standards, we incorporated an 8.8mm laminated inner pane with a safety classification of 1-B-1 to BS EN12600.

When combined with our Skyline Box glazing bars, the system achieves a Class 2 assembly in accordance with CWCT TN66 & TN67, ensuring a secure and durable installation for both building users and maintenance personnel.

"I am absolutely delighted with the roof glazing solution provided by Standard Patent Glazing Co Ltd. The team took my initial vision and, through close collaboration, turned it into a stunning reality. The system seamlessly integrates with the steel framework, and the performance of the glazing units has exceeded expectations.

The balance of light transmission and solar control ensures a comfortable environment for our customers, and the attention to detail in both design and installation has been outstanding.

A huge thank you to the entire team for their expertise and professionalism throughout the project."

Chris Smith
Proprietor of Hogs Head Brew House

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From design to aftercare, we handle every aspect of your project.



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Standard

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