



Traditional Patent Glazing Systems

Designed for
unheated spaces.
Engineered for
durability.

Designed for unheated spaces

Renowned for its reliability and lifespan



Our Traditional Patent Glazing System remains the preferred choice for unheated spaces such as railway stations, glazed canopies, and covered walkways, where thermal insulation is not a primary requirement. Renowned for its reliability and versatility, this system has been installed on thousands of projects nationwide, proving its enduring popularity and performance.

Designed for both aesthetics and function, the system is available with a selection of capping options to suit a variety of architectural styles and structural needs. Its robust design ensures long-term durability, making it a trusted solution for high-traffic environments.

With a strong track record of success, we have installed over 40,000m² of this system in major railway stations across the UK and Ireland in recent years. Its widespread use highlights its resilience and effectiveness in demanding applications.

The system offers two capping options: the W1 'wing', which provides a sleek beaded capping system, or a pressure cap system featuring a cosmetic capping to conceal fixings for a streamlined appearance.

For domestic projects, it is an excellent option for single-glazed canopies, while in commercial settings, it provides a durable and adaptable solution for large unheated spaces. The system accommodates glazing materials from 6mm single glazing up to 35mm multiwall polycarbonate, offering exceptional flexibility.

The continued popularity of the system reflects its quality, reliability, and value, making it an ideal choice for both large-scale infrastructure and smaller architectural projects.



Exceptional versatility, traditional design

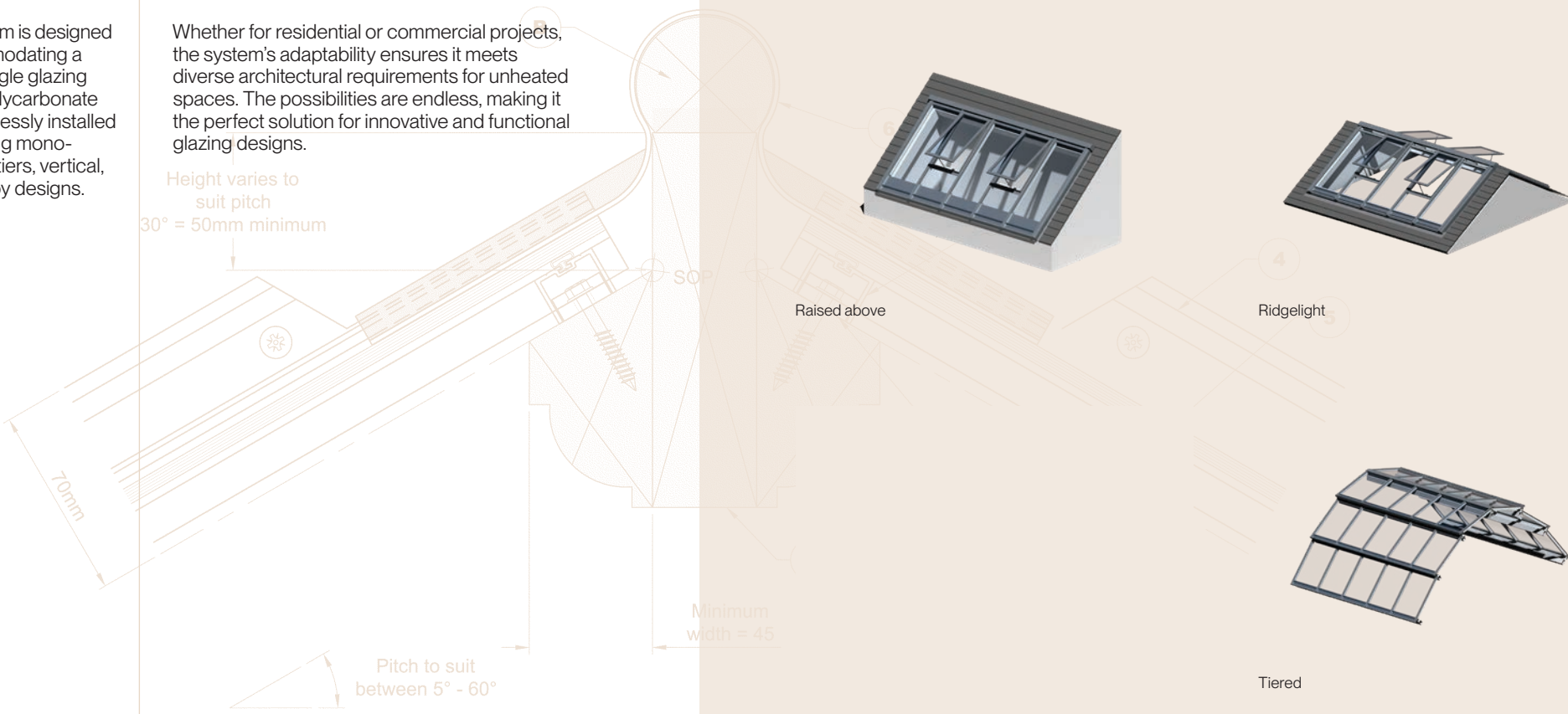
Designed with exceptional versatility



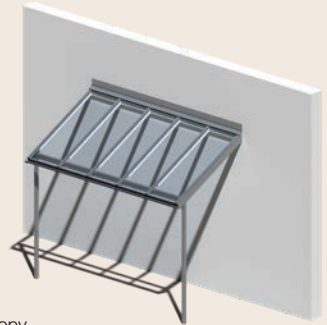
Our Traditional Patent Glazing System is designed with exceptional versatility, accommodating a wide range of configurations for single glazing applications with both glass and polycarbonate sheeting. The system can be seamlessly installed into various roof structures, including mono-pitched, duo-pitched, 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 for unheated spaces. The possibilities are endless, making it the perfect solution for innovative and functional glazing designs.

Height varies to suit pitch
30° = 50mm minimum



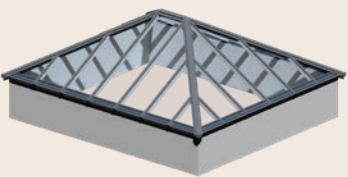
Here are some of the configurations we offer:



Canopy



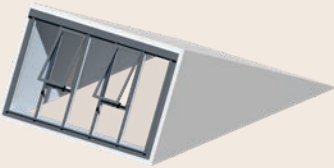
Cranked



Hipped and ridge



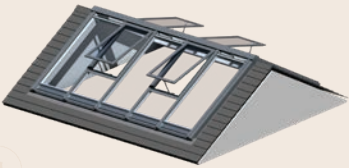
Mono-pitched to wall



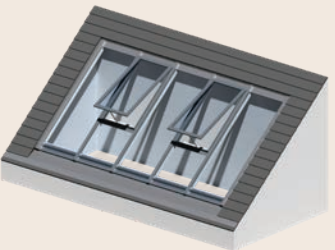
Northlight



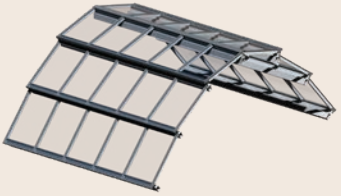
Raised above



Ridgelight



Slate roof in-line



Tiered



Valley

Designed to the highest standards

Engineered for performance and compliance



The Traditional Patent Glazing System is designed to meet stringent industry standards, ensuring reliability in both structural integrity and environmental resistance.

Fully tested to BS 5516 for sloped glazing, it also conforms to CWCT TN66 & TN67 and ACRM non-fragility requirements, offering superior impact resistance and safety when incorporating an inner pane of 1-B-1 laminated glass in accordance with BS EN 12600.

Compliance with BS 6375-1 guarantees exceptional weather performance, including resistance to air and water infiltration, making it a robust choice for demanding environments.

Versatile and aesthetically refined design

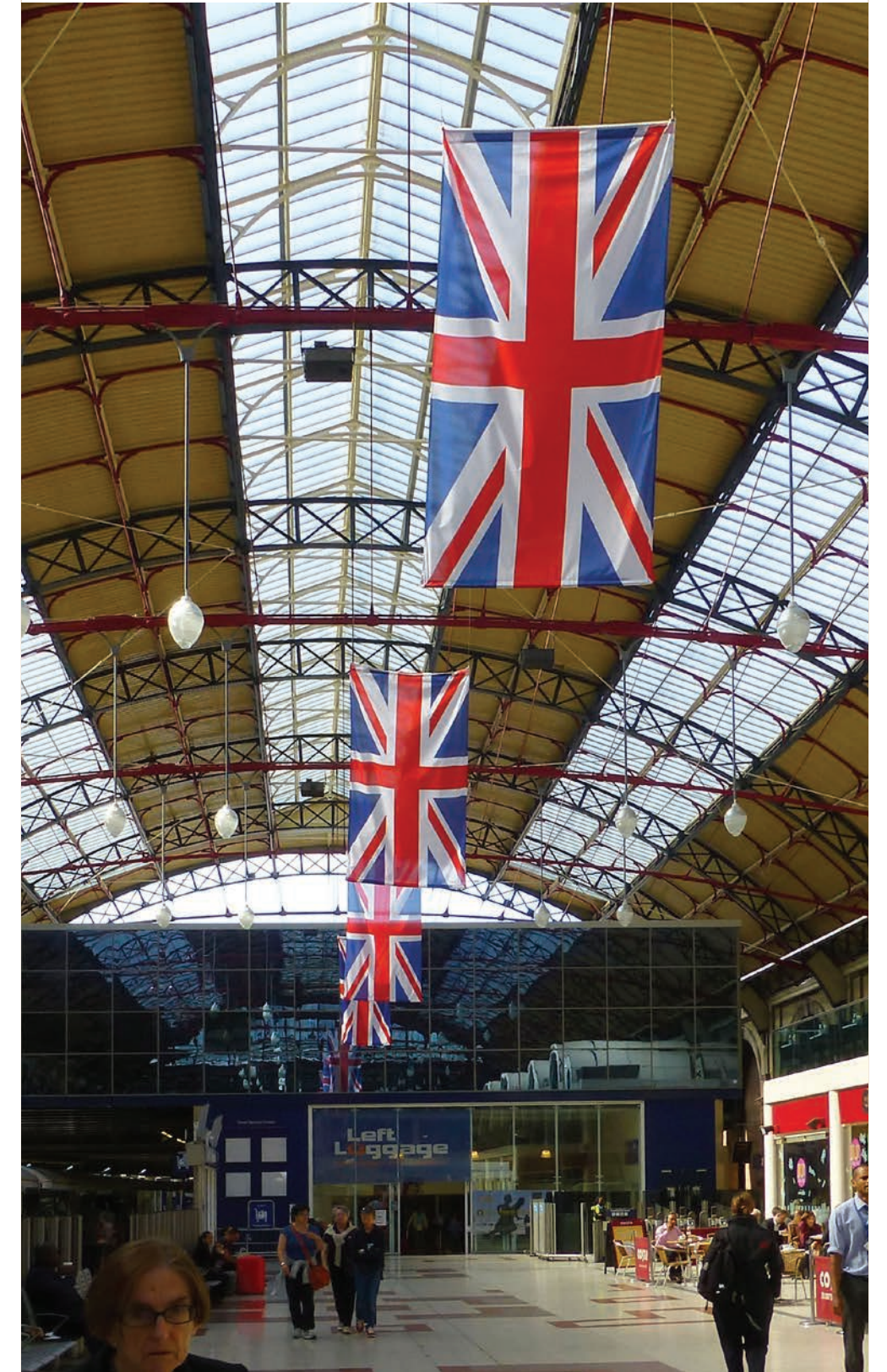
The system's stylish economy canopy bar provides a sleek, modern appearance without compromising on strength. A choice of outer capping sections or wings allows for aesthetic and functional flexibility, while the concealed fixings option enhances visual appeal by maintaining clean architectural lines.

Structural adaptability and integration

The system is engineered for higher tolerance to structural discrepancies, allowing seamless integration into a variety of building frameworks. Its design accommodates opening vents, skylights, and canopy/walkway applications, making it a versatile solution for both commercial and domestic projects. Additionally, the system supports single glazing or polycarbonate panels, offering adaptability to different insulation and transparency requirements.

Cost-effective without compromise

Balancing affordability with high-performance durability, the system remains the leading choice for large unheated spaces. Its precision-engineered components deliver a cost-effective yet robust solution, ensuring long-term reliability for budget-conscious projects.



Designed to the highest standards

Span chart

Performance data for Traditional Patent Glazing Bars.

Advantages

- Stylish economy canopy bar.
- Choice of outer capping sections or wings.
- ‘Concealed fixings for capping option.
- Higher tolerance for discrepancies in structure.
- Suitable for accepting opening vents.
- Suitable for skylights.
- Suitable for canopies/walkways.
- Single glazing or polycarbonate options.

Bar section	Bar depth (mm)	lxx-mm ⁴	Zxx-mm ³
TW1	65	204,902	4641
TC1	65	210,287	4913
TW2	80	408,701	8101
TC2	80	400,031	8049
TW3	100	947,421	17,582

The glazing bar spans shown above are based on using 6mm thick glass for the double glazed, single glazed and canopy types, and the bars being spaced at 600mm centres.

We will select the appropriate glazing bar for each contract.

Spans are dependent upon the site location and exposure rating, site altitude, distance from the sea, height of glazing from ground level, shape of the roof, pitch of glazing, glazing bar centres, glass weight, wind speeds, snow load, dead load and maintenance loads.

Considerations

NOT ‘L’ Reg compliant without using ‘Trade Offs’ from other parts of the building.

However can be made ‘L’ Reg compliant if Vacuum Glass ‘VG’ is incorporated.

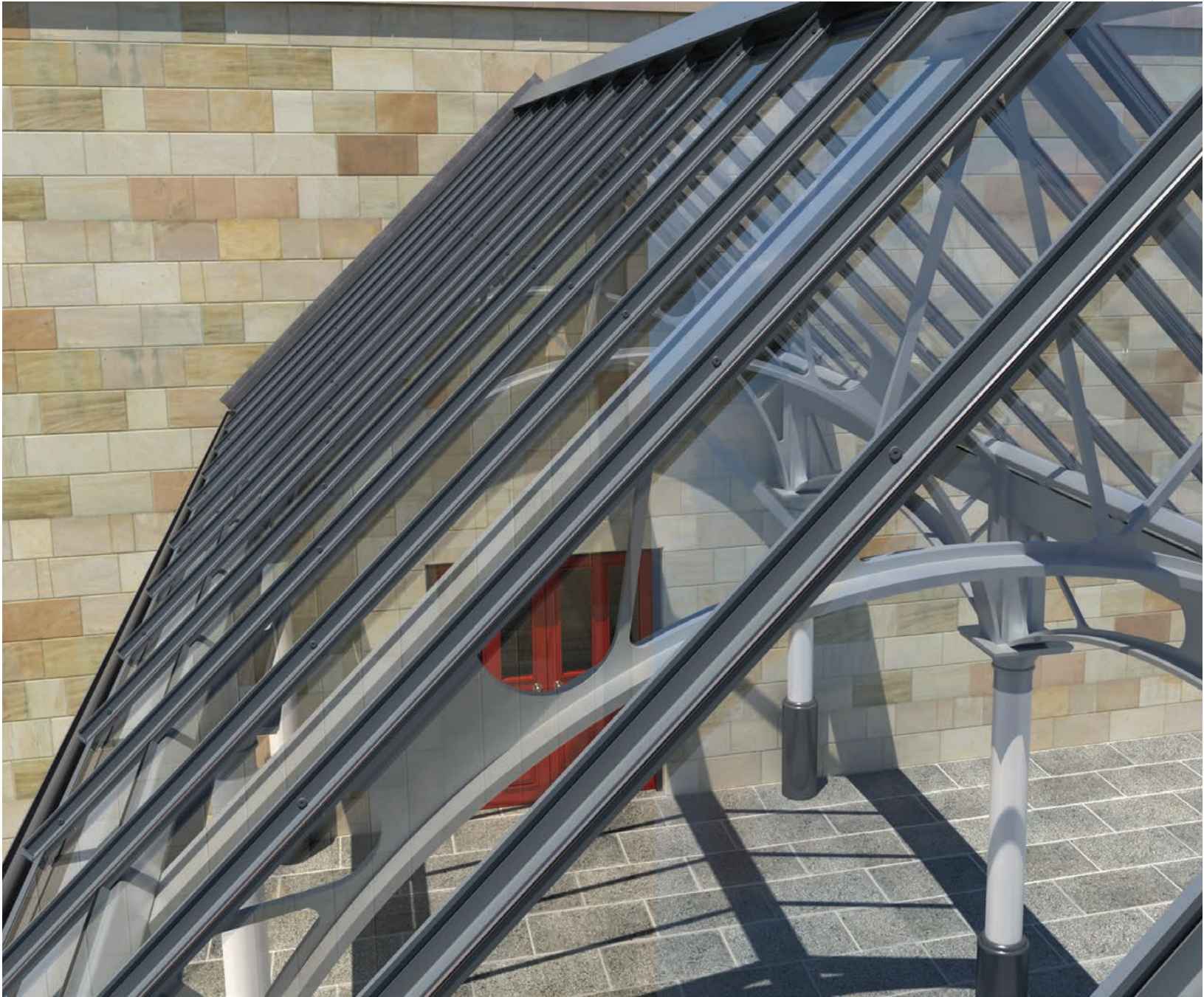
Roof span (mm)*		
Double glazing	Single glazing	Canopy glazing
–	1340-3160	1450-2690
–	1340-3160	1450-2690
–	1770-4170	1920-3560
–	1770-4170	1920-3560
–	2610-5560	2830-4590

* The above spans for each glazing bar have two values.

The lower span values are calculated using the most extreme environmental loadings possible in the UK whereas the higher span values are based on the least extreme.

Due to the wide range of these values it is therefore essential that we are supplied with the site postal code to enable us to calculate the correct glazing bar type for every project.

There are a large number of variables which are used to determine the maximum span of the glazing bars so please do not attempt to buy any glazing bar materials from us without us first allowing us to carry out the necessary calculations for your project.



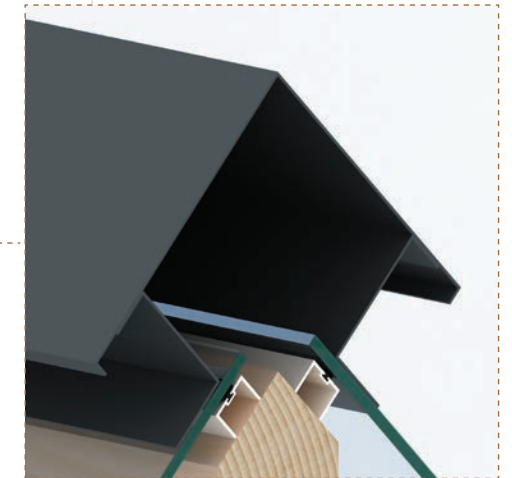
Technical drawing

This CGI render showcases a 3D technical drawing of our Traditional 'Wing' Glazing System in a duo-pitched configuration with single glazing.

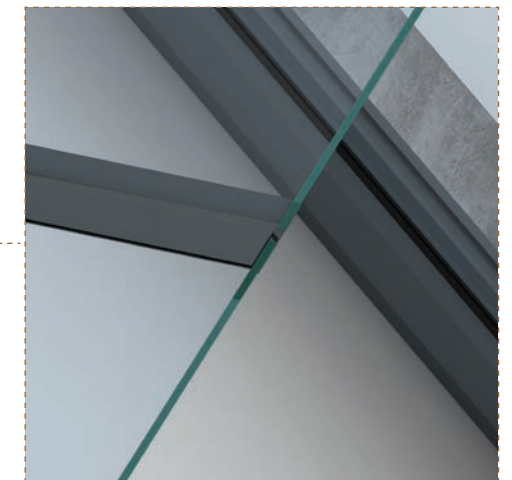
It highlights key interface details, including the eaves, intermediate joints (for spans over 3150mm), ridge, and verge connections.

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

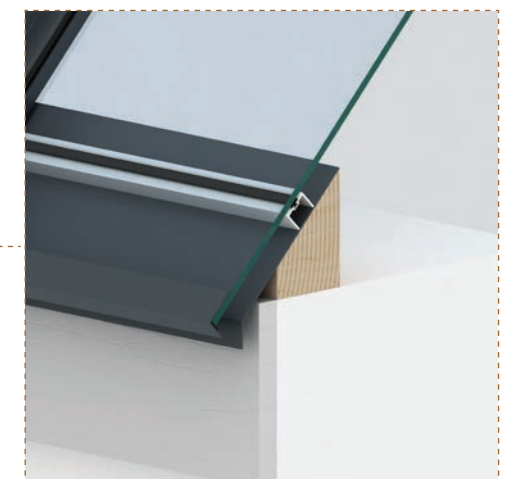
For additional 2D, 3D & NBS H10 Specification assets, visit our download centre.



Ridge



Intermediate

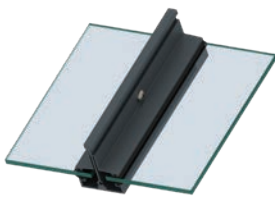


Eaves

Designed to the highest standards

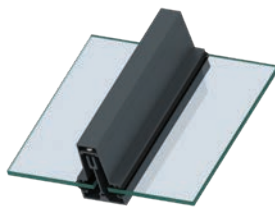
Glazing bar configurations

This Traditional range can accommodate glazed infills from 6mm to 35mm.



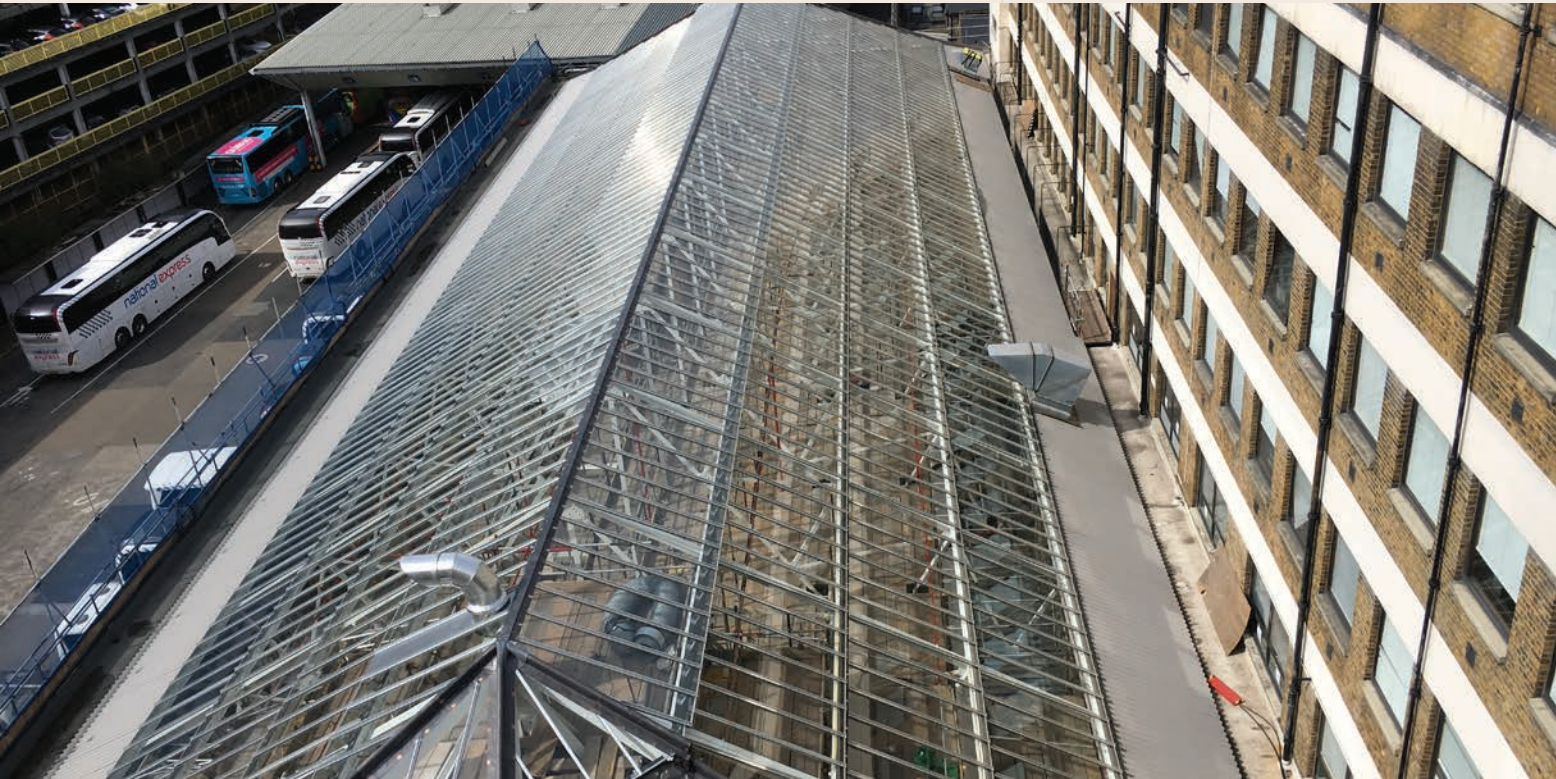
WCA-AAA-AA1

Traditional 'Wing' TW1 type polyester powder coated aluminium glazing bar with 2-piece W1 beaded cappings—single glazed.



CCA-AAA-AA1

Traditional 'Cap' TC1 type polyester powder coated aluminium glazing bar with CT1 & CT0 cosmetic cappings—single glazed.



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

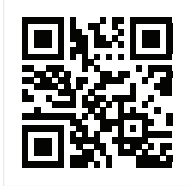
Vacuum glazing (VG) delivers exceptional thermal insulation with ultra-thin, lightweight panels. Achieving centre pane U-values as low as 0.4W/m²K (and G values down to 0.32 with solar control), it's ideal for conservation projects and energy-efficient applications.

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

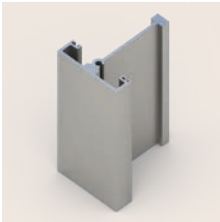
As glass technology continues to evolve, please scan the QR code for the most current product information.



Designed to the highest standards

Component list

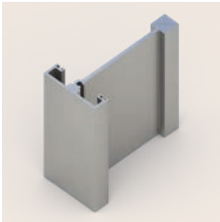
Glazing bars



TW1



TW2



TW3



TC1

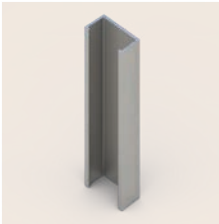


TC2

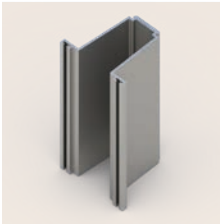
Cappings



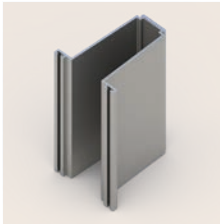
W1



CT0



CT1

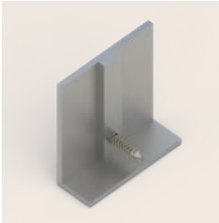


CT2

End stops & fixing plate



CS9

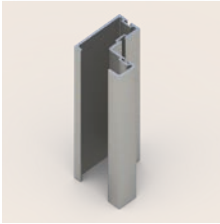


CS10



FP1

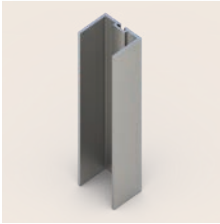
Weather bars



WB1

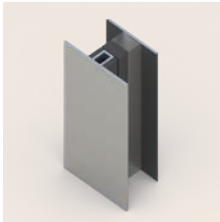


WB3

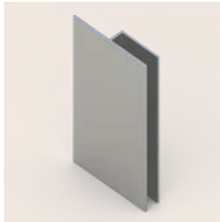


WB4

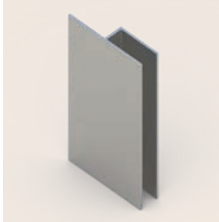
Glass abutment joints



JS2



JS3



JS4

Glass edge protectors



GEP1



GEP3

End bar packs



EP1



EP2



EPS3

Gaskets



AB635 B



AE065 B

Designed to be versatile

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

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

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

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

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

Our popular colours

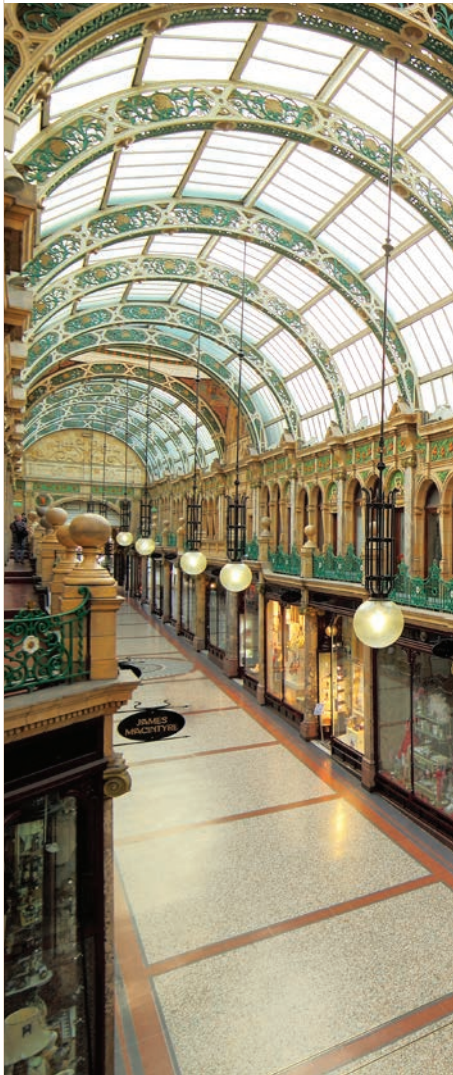
7015	Slate grey
------	------------

3003	Ruby red	5003	Sapphire blue
3004	Purple red	5004	Black blue
3005	Wine red	5008	Grey blue
3009	Oxide red	5010	Gentian blue
5000	Violet blue	5011	Steel blue
5002	Ultramarine blue	5012	Light blue

6006	Grey olive	7001	Silver grey
6009	Fir green	7004	Signal grey
6016	Turquoise green	7005	Mouse grey
6018	Yellow green	7011	Iron grey
6019	Pastel green	7012	Basalt grey
6027	Light green	7015	Slate grey

7032	Pebble grey	7043	Traffic grey B
7035	Light grey	7044	Silk grey
7037	Dusty grey	8011	Nut brown
7038	Agate grey	8014	Sepia brown
7040	Window grey	8015	Chestnut brown
7042	Traffic grey A	8017	Chocolate brown

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																	



Designed for British Standards

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.



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.

Designed to the highest quality

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

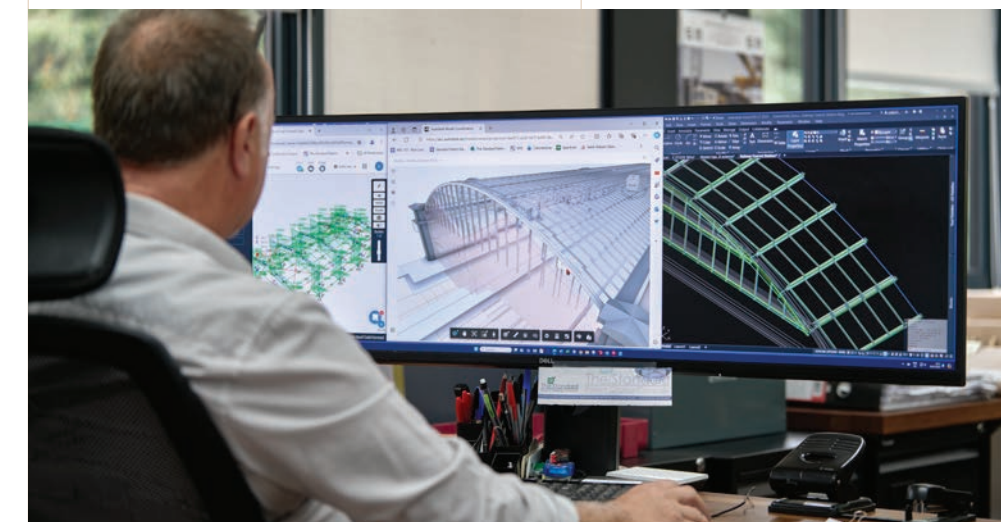
We are deeply committed to health and safety. All of our employees are fully aware of their responsibilities in this regard and our relevant staff hold the necessary qualifications for their roles. These include NEBOSH, IOSH, SSSTS, SMSTS, CSCS, PTS, PAL-IPAF, First Aid, and PASMA certifications.

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



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.

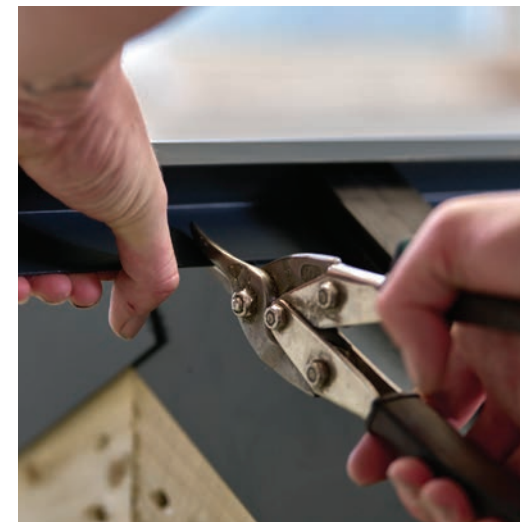
We utilise a combination of state-of-the-art machinery and original Victorian equipment to produce our distinctive Heritage lead-covered steel glazing bars, ensuring both innovation and tradition in our manufacturing process.

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.

Victoria Quarter



Patent glazing replacement at Victoria Quarter, Leeds

Project overview

The Victoria Quarter in Leeds, renowned for its historic charm and architectural significance, underwent a meticulous refurbishment to restore its fine arcade to its former glory. We played a pivotal role in this restoration by replacing over 1000m² of patent glazing.

Glazing solution

Our Traditional type aluminium glazing system was selected for its durability and aesthetic appeal. We utilised 7mm Georgian Wired Cast glass to faithfully match the original glazing system, ensuring the preservation of the arcade's historic character.

This installation was carried out when Georgian wired glass met safety standards in accordance with BS6206. If installed today, alternative products would be used to comply with current safety regulations. See 'Guide to glass' on page 15 for further information.

Transformation and recognition

Since the restoration, the County Arcade within the Victoria Quarter has been celebrated as one of the most beautiful shopping centres in Europe. This accolade underscores the success of our glazing installation in contributing to the overall ambiance and allure of the arcade.

Main Contractor:

Ellenby Contracts Ltd

Architect:

Leeds City Council





Expertise in complex configurations

The project presented complex glazing configurations, which were successfully handled by our in-house experts. From initial design through to manufacturing and installation, our team demonstrated proficiency and meticulous attention to detail, ensuring the seamless integration of the new glazing with the historic structure.

Conclusion

Our contribution to the Victoria Quarter restoration exemplifies our commitment to preserving architectural heritage while enhancing functionality and aesthetics through innovative glazing solutions. The successful completion of this project underscores our expertise in delivering high-quality glazing installations for iconic landmarks.

This case study highlights our capability in managing large-scale glazing projects with complex requirements, showcasing our dedication to craftsmanship and preservation of architectural heritage at the Victoria Quarter in Leeds.



“As Senior Quantity Surveyor at Ellenby Contracts Ltd, overseeing the refurbishment of the Victoria Quarter in Leeds, I had the pleasure of working with Standard Patent Glazing Co Ltd on the replacement of over 1000m² of patent glazing.

Their expertise in managing complex glazing configurations was evident throughout the project. Their Traditional type aluminium glazing system, combined with 7mm Georgian Wired Cast glass, perfectly matched the original glazing, contributing significantly to the restoration of the County Arcade.

The result is remarkable – the Victoria Quarter, particularly the County Arcade, is now recognised as one of the most beautiful shopping centres in Europe, a testament to the quality of craftsmanship delivered by them.

Their in-house team of experts handled every aspect of the project with professionalism and attention to detail. From design to manufacturing and installation, they ensured a seamless process that met both aesthetic and functional requirements.

I would highly recommend them for their exceptional service and expertise in delivering high-quality glazing solutions.”

Chris Perrior
Senior Quantity Surveyor at
Ellenby Contracts Ltd

Victoria Railway Station

Designed for unheated spaces

Case study

Roof glazing replacement at London Victoria Train Station

Project overview

The London Victoria Train Station, an iconic transportation hub in the heart of the city, required a comprehensive roof glazing replacement to preserve its historical charm and enhance safety. This case study highlights the successful replacement of 6000m² of patent glazing at the station, including the unique challenges and innovative solutions implemented during the project.

Scope of work

The primary objective of this project was to replace the existing patent glazing on the curved roof of London Victoria Train Station. Given the station's historical significance and the listed nature of the original glazing, it was essential to maintain its architectural integrity while improving safety standards. The project involved the replacement of the old glazing with special 8.8mm thick stippolyte patterned laminated Class A safety glass, designed to closely replicate the appearance of the original Georgian wired glass.

Main Contractor:
May Gurney Limited

Architect:
Network Rail





Materials and techniques

To achieve the desired aesthetic while enhancing safety, a special 8.8mm thick stippolyte patterned laminated Class A safety glass was chosen.

This glass offered the appearance of traditional Georgian wired glass while meeting modern safety standards. The project also utilised Traditional type aluminium patent glazing bars with wings for the framing sections. These components were carefully selected to provide structural support and maintain the historic look of the station.

Challenges and solutions

Listed building constraints:

The listed status of the station's glazing presented a significant challenge. To overcome this, the project team meticulously designed the special laminated safety glass to resemble the original glass, ensuring historical accuracy.

Storage limitations:

With limited storage space on-site, just-in-time deliveries were crucial to ensure that materials and equipment were available precisely when needed. This logistical challenge was efficiently managed to minimise disruption to station operations.

Complex curved roof:

The curved design of the station's roof added complexity to the glazing replacement process. Precise measurements and specialised installation techniques were employed to fit the glass panels accurately within the curvature of the roof.

Project outcome

The replacement of the patent glazing at London Victoria Train Station was executed with precision and attention to historical authenticity.

The project resulted in a total of 6000m² of new glazing, offering improved safety while preserving the station's architectural heritage. The special laminated safety glass, with its stippolyte pattern and Class A safety rating, provided the station with a timeless aesthetic that closely resembled the original Georgian wired glass.

This successful project not only restored the station's historical charm but also ensured the safety and longevity of its glazing system. It stands as an exemplary case of a delicate balance between historical preservation and modern functionality, delivering a functional and aesthetically pleasing solution for one of London's most iconic train stations.



“I want to extend my appreciation to Standard Patent Glazing Co Ltd for their outstanding work on the roof glazing replacement project at London Victoria Train Station. Their expertise in preserving historical charm while enhancing safety was truly impressive, and their innovative solutions were instrumental in the project's success.

The challenges posed by the listed status of the station's glazing, limited on-site storage space, and the complex curved roof were expertly addressed by the project team.

The precision and attention to historical authenticity in the replacement of 6000m² of

glazing not only restored the station's charm but also ensured its safety and longevity.

This project is a remarkable example of the delicate balance between historical preservation and modern functionality, and it showcases their ability to deliver aesthetically pleasing and functional solutions for extensive and iconic landmarks.

I highly recommend their expertise to anyone seeking a large-scale daylighting solution.”

Alan Clarkson
Project Manager at May Gurney Ltd

Victoria Coach Station

Designed for unheated spaces

Case study

Roof patent glazing at Victoria Coach Station, London

Project overview

Victoria Coach Station, an iconic transportation hub in London, required our expertise for the design, manufacture and installation of 1300m² of roof patent glazing. Our Traditional patent glazing system was chosen to enhance the terminal's aesthetics and functionality, incorporating 9.5mm laminated safety glass to meet CWCT TN66 & TN67 standards for non-fragility.

Assurance through testing

To ensure compliance and safety, we conducted an in-house non-fragility test witnessed by the Transport for London (TFL) engineering team. This rigorous testing, performed at our facility in Dewsbury, West Yorkshire, provided TFL with assurance that our glazing system could withstand impact and provide a non-fragile assembly in accordance with industry standards.

Bespoke access system

In addition to the glazing system, we designed and tested a bespoke access system for future maintenance. This system underwent a comprehensive testing regime at our facility to ensure durability, reliability, and ease of access for maintenance personnel, contributing to the long-term sustainability of the installation.

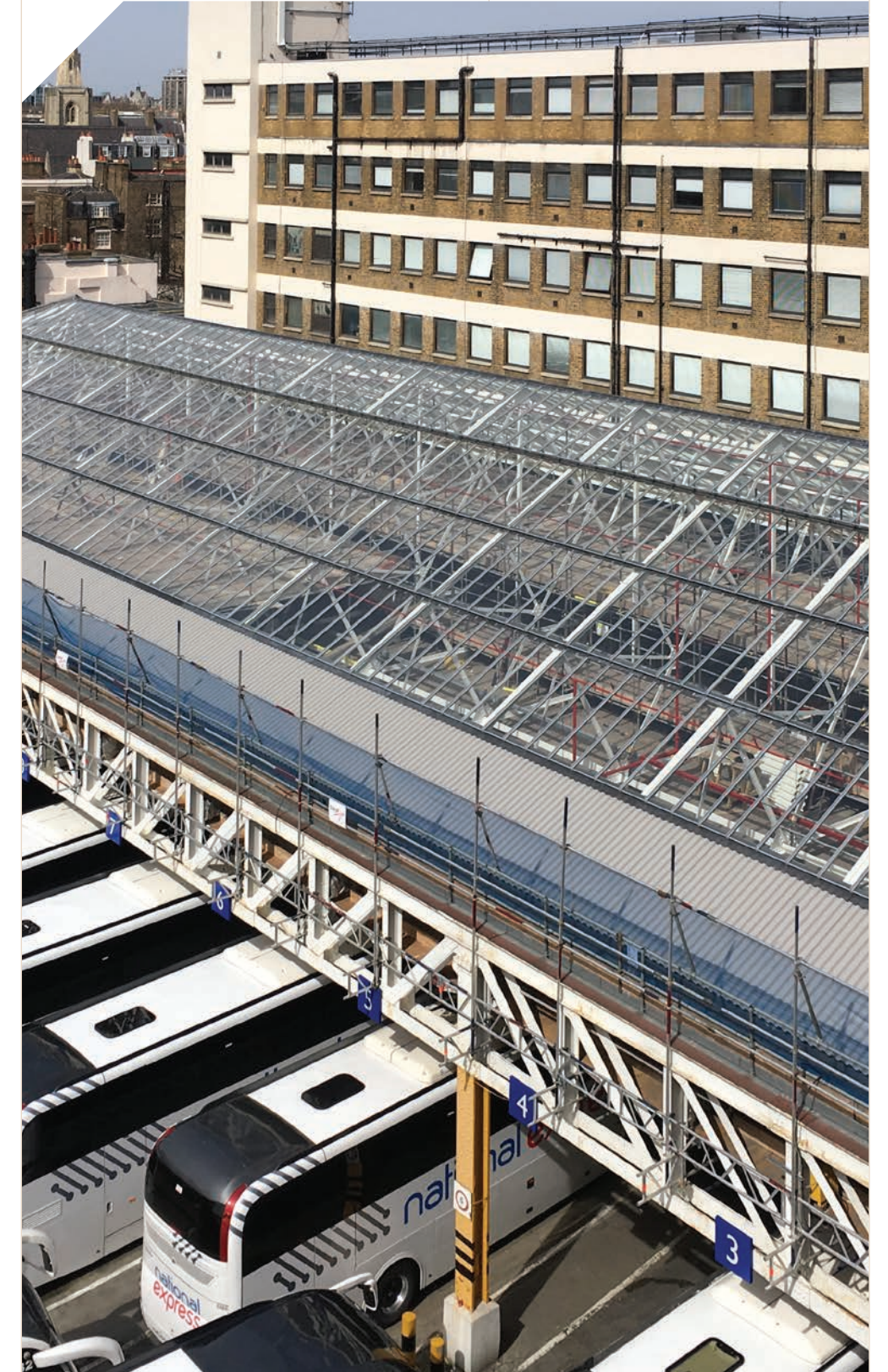
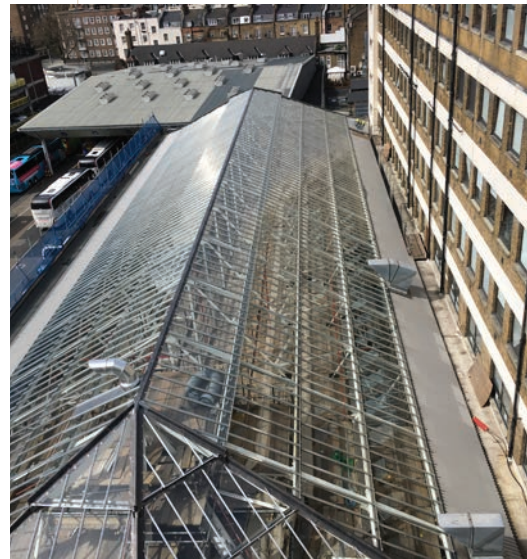
Project management and delivery

The project presented initial complexities during tender and design phases, but our dedicated in-house experts managed every aspect with precision and expertise. Despite the challenges, we successfully delivered the project within the agreed programme, ensuring minimal disruption to the operation of Victoria Coach Station.

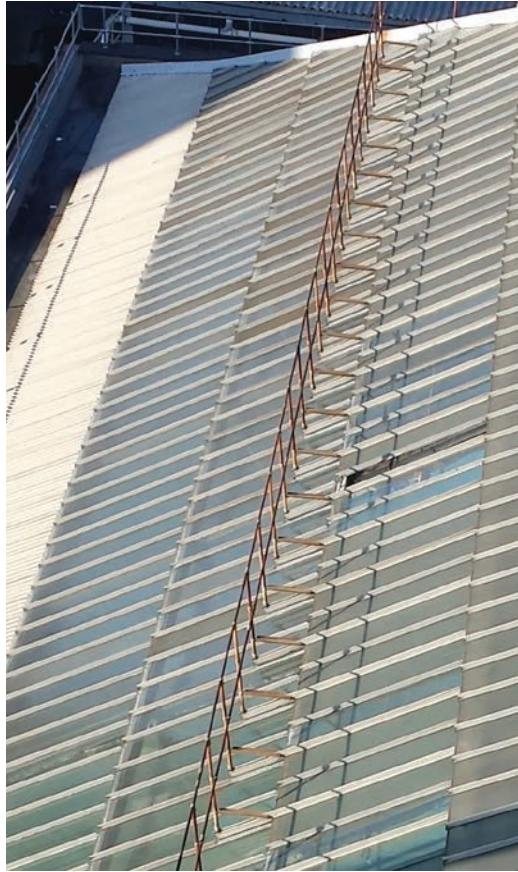
Conclusion

Our involvement in this project highlights our commitment to delivering high-quality, safe, and functional glazing solutions for iconic landmarks. Our capability in design, testing, and project management ensures that we meet and exceed client expectations, contributing to the longevity and efficiency of architectural installations.

This case study underscores our capability in managing large-scale glazing projects with stringent safety and design requirements, demonstrating our commitment to excellence.



Designed for unheated spaces



“As Project Manager at Transport for London (TFL), overseeing the roof patent glazing project at Victoria Coach Station, I am pleased to commend Standard Patent Glazing Co Ltd for their expert delivery and cost-effectiveness.

They demonstrated exceptional expertise in providing a robust and aesthetically pleasing solution for our main bus terminal. Their Traditional Patent Glazing System, incorporating 9.5mm laminated safety glass, not only met but exceeded our stringent non-fragility requirements as per CWCT TN66 & TN67 standards.

We were particularly impressed by their proactive approach in conducting an in-house non-fragility test, witnessed by our engineering team, at their facility in Dewsbury, West Yorkshire. This demonstration provided us with confidence in the durability and safety of their glazing system.

Additionally, their development of a bespoke access system for future maintenance underwent rigorous testing at their facility, ensuring practicality and longevity of the installation.

Throughout the project, their in-house experts managed every aspect with professionalism and attention to detail, delivering within the agreed programme and budget. Their commitment to excellence and customer satisfaction was evident at every stage.

I would highly recommend them for their expertise, reliability and cost-effectiveness in delivering complex glazing solutions for infrastructure projects.”

Scott Olivant
Project Manager at Transport for London (TFL)



Leicester Railway Station

Roof glazing replacement at Leicester Railway Station

Project overview

Leicester Railway Station, a vital transportation hub in the heart of the city, required a significant roof glazing replacement project to enhance its structural integrity and functionality. This case study showcases the successful replacement of 2500m² of patent glazing at the station, including innovative design elements to improve future maintenance access.

Scope of work

The core objective of this Leicester railway station glazing project was to replace the existing high-level patent glazing on the station's roof. The 2500m² area in need of replacement presented a substantial undertaking. The chosen solution involved the installation of 6mm solid clear polycarbonate sheeting, which was secured in place using Traditional type aluminium glazing bars with wings. A key feature of the project was the incorporation of a walkway, affixed to robust, heavy-duty glazing bars, to facilitate future maintenance operations.

Materials and techniques

To achieve the project's objectives, 6mm solid clear polycarbonate sheeting was selected as the glazing material. This material offers both structural resilience and excellent light transmission. Traditional aluminium glazing bars with wings provided the framing support for the polycarbonate sheets, ensuring secure and reliable attachment. The added walkway feature allowed for safe access during maintenance activities, promoting long-term durability and ease of service.



Main Contractor:

May Gurney Limited

Architect:

Network Rail



Challenges and solutions

Structural enhancement:

The replacement of patent glazing aimed to improve the station's overall structural integrity and functionality. The 6mm solid clear polycarbonate sheets offered both durability and enhanced light distribution, addressing this challenge effectively.

Maintenance access

The installation of a walkway, securely fastened to heavy-duty glazing bars, addressed the challenge of future maintenance. This feature provided safe access for maintenance personnel, ensuring that the glazing system could be easily serviced and maintained.

Project outcome

The Leicester Railway Station roof glazing replacement project was executed successfully, enhancing both the station's structural resilience and future maintenance capabilities. The installation of 2,500m² of 6mm solid clear polycarbonate sheeting, supported by Traditional aluminium glazing bars with wings, ensured the project's longevity and reliability.

The incorporation of a walkway into the design demonstrated a forward-thinking approach, as it not only added to the station's accessibility but also contributed to the ease of future maintenance. This case study showcases a practical and innovative solution that not only improved the station's aesthetics and functionality but also ensured that it remains a safe and efficient transportation hub for years to come.

“I am delighted to commend the expertise and innovative approach of Standard Patent Glazing Co Ltd, as demonstrated in the roof glazing replacement project at Leicester Railway Station. This project represented a substantial undertaking, with the replacement of 2500m² of patent glazing, and their solutions were truly commendable.

The challenges presented by the need to enhance the station's structural integrity and functionality were met with ingenuity.

The incorporation of a walkway to facilitate future maintenance access showcased a forward-thinking approach to ensure the project's longevity and reliability. This project serves as a testament to their commitment to delivering both practical and innovative solutions, and I highly recommend their expertise to anyone seeking to enhance the functionality and safety of transportation hubs and historical landmarks.”

Darren Corbett
Construction Manager at May Gurney Ltd

Designed for support

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



t: 01924 461 213

e: www.patent-glazing.com

The Standard Patent Glazing Co. Ltd, Flagship House, Forge Lane, Dewsbury, West Yorkshire, WF12 9EL

