

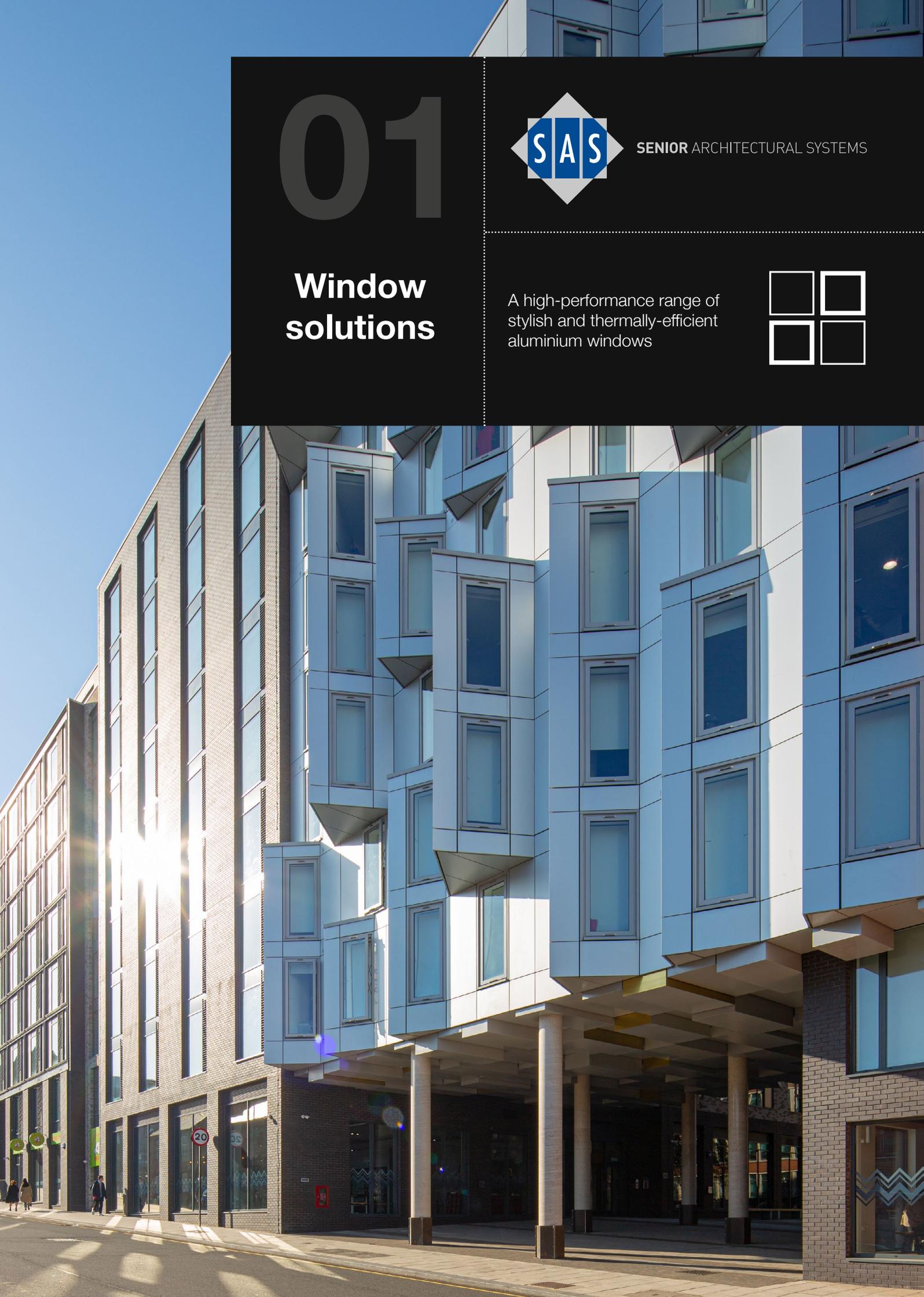
01



SENIOR ARCHITECTURAL SYSTEMS

Window solutions

A high-performance range of stylish and thermally-efficient aluminium windows







Welcome to Senior

From thermally-efficient aluminium windows to slimline curtain wall systems and robust commercial doors, Senior offers a stylish suite of products designed to meet the requirements of a wide range of projects. At Senior we have the products and the technical expertise to bring even the most challenging design briefs clearly into view.

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 SENIOR ARCHITECTURAL SYSTEMS		

Care has been taken to ensure that the contents of this publication are accurate. Due to our continual process of development and innovation we retain the right to change specifications without prior notice. Please speak to us to discuss your specific project requirements ahead of placing an order.

Introduction



As the largest privately owned aluminium fenestration systems house in the UK, we design, manufacture and supply innovative and high-performance aluminium windows, doors and curtain wall systems for use on projects across the sectors. With a strong focus on supply chain collaboration, we recognise the value of relationships and work closely with fabricators, contractors and architects to deliver fenestration solutions that perform as well as they look.

Our state-of-the-art facilities in South Yorkshire include our main manufacturing base in Denaby, which is home to our in-house powder coating paint line, and our new thermal improvement facility in Rotherham. Our dedicated distribution centre in Scotland further supports our work on projects across the UK.





Built around you

Our innovative products speak for themselves but we believe the specification process should be a conversation and through early engagement, we can bring valuable solutions to the table. From help with product choice and thermal calculations right through to guidance during the fabrication and installation process, we have the expertise and resources to support you every step of the way.



BES 6001: Issue 3.1
Cert/Ref No. RS0054



Council for Aluminium
in Building
Member



Official Police Security Initiative

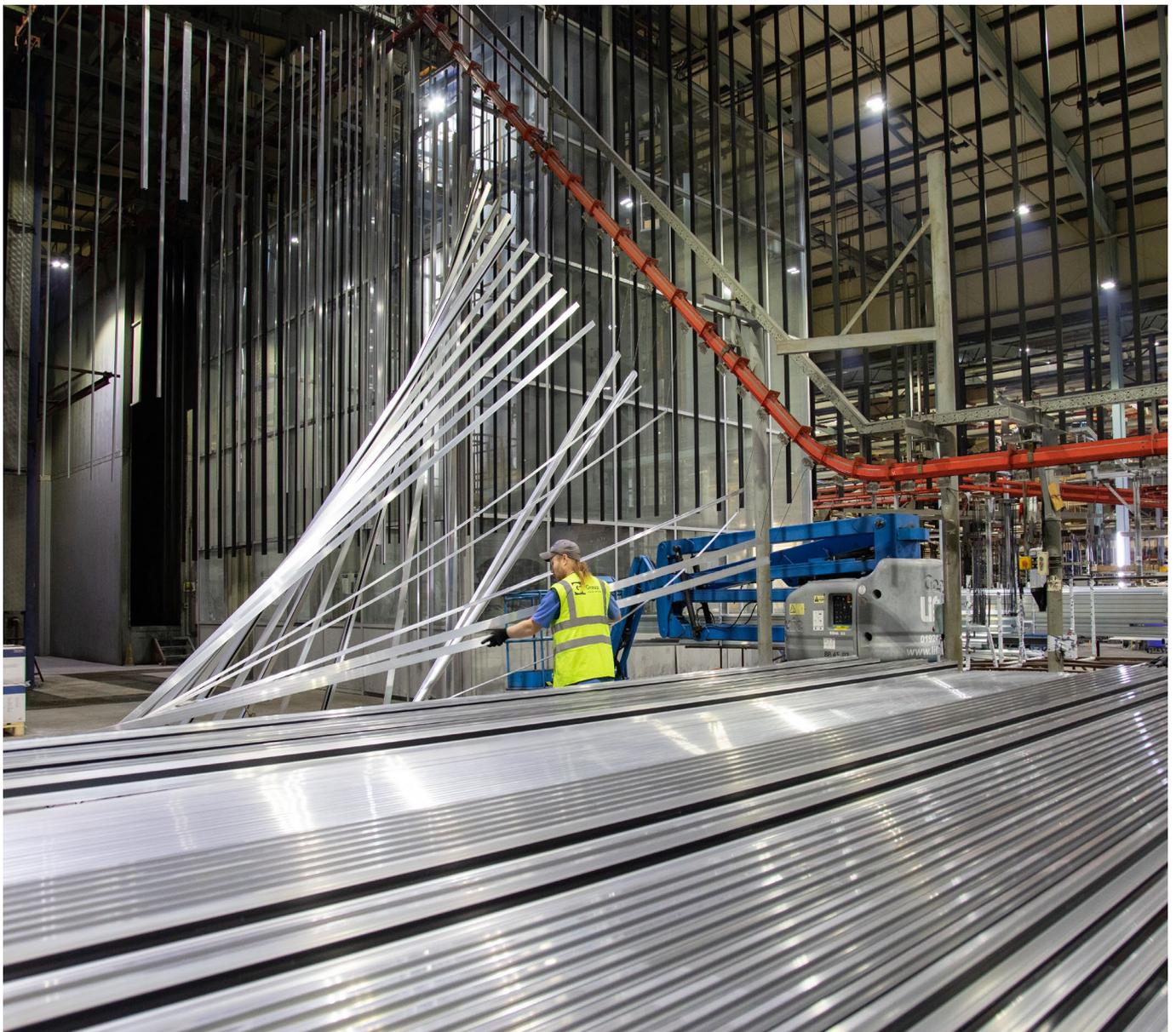




Why specify Senior?

We've worked with some of the biggest names in construction on a variety of projects across the sectors including education, healthcare, stadia and leisure, commercial mixed-used developments and high-rise residential schemes. Our portfolio may be

varied but one thing that remains consistent is the way we work and that's why we have established strong supply chain agreements and enjoy regular repeat business.



Sustainable manufacturing



From offering **energy-efficient and fully recyclable** aluminium fenestration products, to implementing various **low carbon initiatives** throughout our manufacturing facility, we're committed to reducing carbon emissions both on and off site. We're also fully **accredited to BRE Global's BES 6001 standard and ISO 14001**.

Complete product range



All our products are **designed to perform** as well as they look, from the patented **thermal-efficiency** of our PURE® windows and doors, to our **slimline** curtain wall systems, and **robust** commercial door range. With solutions for both **commercial and residential** settings, we can offer the full package.

Expert design and technical support



Our **knowledgeable team** of architectural advisors are regionally based so they can work closely with you to help deliver **the most effective fenestration package** for your project. Through early engagement, we can **assist with everything** from product choice, technical design detailing and U-values, to help with carbon calculations and BREEAM ratings.

In-house powder coating facility



Our **state-of-the-art powder coating facility** not only significantly **reduces the amount of waste** product sent to landfill each year but also **reduces the risk of outsourcing** to another supplier. We can **manage the process completely in-house**, offering a **large choice of colours and protective finishes** for all our aluminium fenestration systems.

UK designed and manufactured



With two main manufacturing sites in **South Yorkshire**, including our new thermal improvement facility in **Rotherham**, and our distribution centre strategically located in Livingston, Scotland, we can supply aluminium fenestration solutions for projects nationwide. As the UK's largest privately owned aluminium fenestration systems house, we also have the autonomy to offer a **flexible and friendly service** that meets the individual needs of all our customers.

Secure and reliable supply chains



We believe in the power of supply chain collaboration which is why we're committed to maintaining positive relationships with our fabricator and installer base by offering **technical advice, product training and on-site support**. We have a number of **trusted and experienced partners** and together, have a **proven track record** of delivering projects across the sectors.



The home of PRe®

In 2015, Senior revolutionised the aluminium fenestration industry with the launch of the PRe® aluminium window system.

A year later, the system was awarded a UK patent (UK Patent Number GB252363.8) in recognition of its unique construction and ability to achieve some of the lowest U-values available. As the popularity of the PRe® window system soared, we expanded the range to include a variety of different window styles as well as complementary sliding and folding sliding commercial door solutions.

So, what makes PRe® so unique?

The answer is the thermal barrier which, unlike any other system on the market, is manufactured from expanded polyurethane foam (PUR). Traditionally used in insulation products, the innovative use of PUR as a thermal barrier in windows and doors gives the PRe® range the potential to offer exceptional thermal performance, with our aluminium windows achieving some of the lowest U-values.





PURe[®] performance



A range of window options



Easy to fabricate and install



Fully compatible with PURe[®] door range



Complete system is fully recyclable



Can contribute to reducing overall carbon calculations



Low U-values and enhanced acoustic performance





Keeping it green

Sustainability isn't just a key part of our product offering, it's a fundamental part of our company ethos.

From our commitment to ensuring our manufacturing techniques are as carbon-neutral as possible to developing an energy-efficient product range that offers 'cradle-to-cradle' recyclability, we strive to limit the environmental impact of all our business operations at every stage.

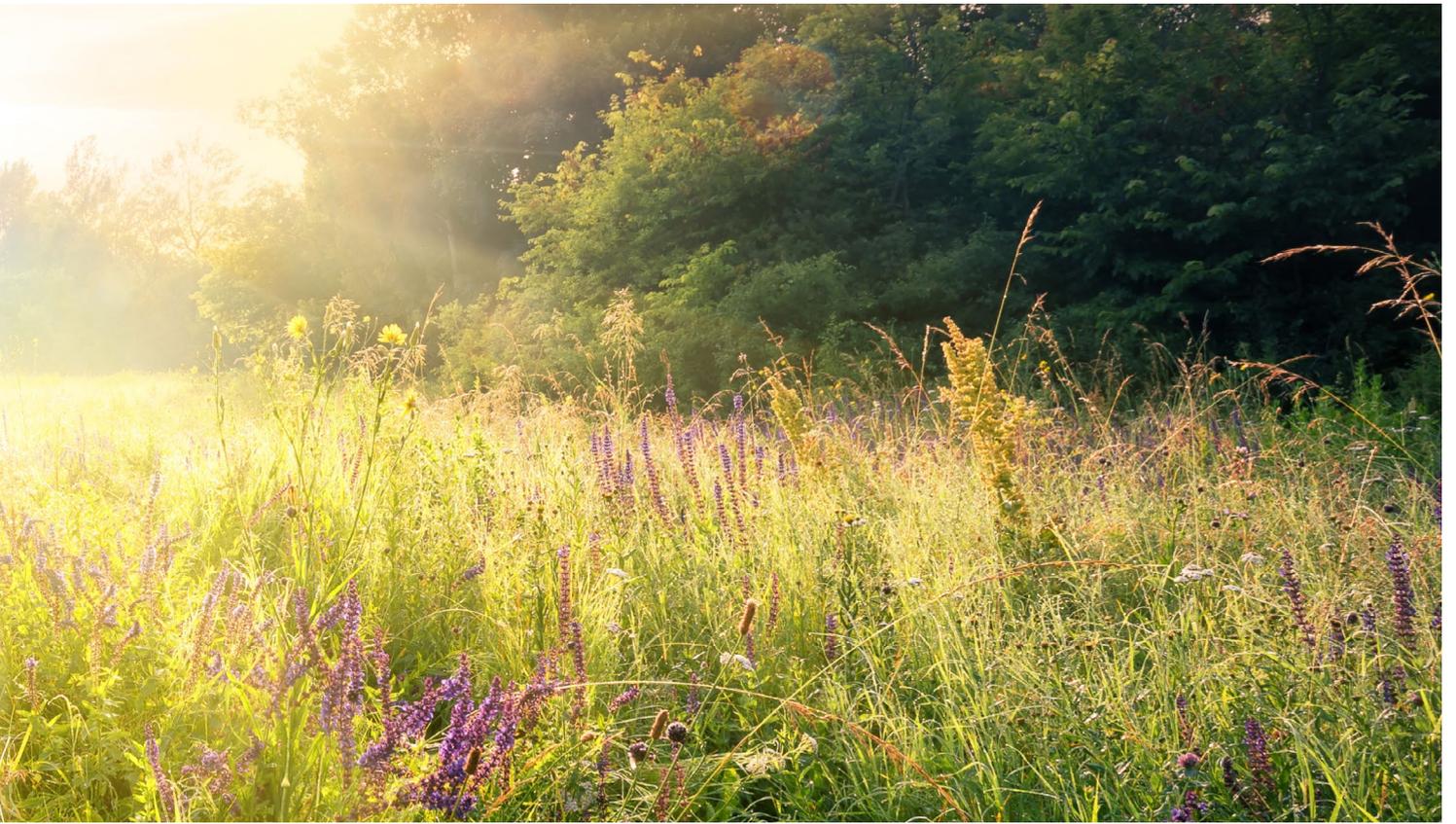
Our products maximise the unique properties of aluminium, which combines exceptional strength with the ability to be endlessly recycled with no detriment to its quality. The durability of the material and closed-loop recycling process make aluminium fenestration systems a truly sustainable choice.

One of our flagship initiatives has been the investment in our in-house powder coating facility which is one of the most efficient of its kind and has helped significantly reduce the amount of waste generated. We also hold accreditation to the BRE Global's BES 6001 standard which confirms that all our products are manufactured using sustainably and ethically sourced recycled aluminium.

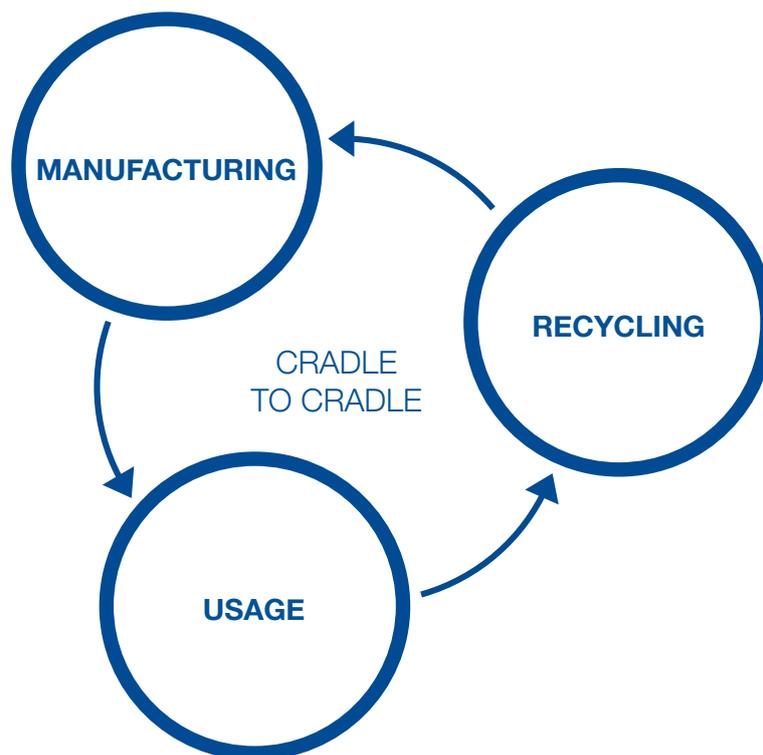
We're also reducing our carbon-footprint in the following ways:

- In-house PUR processing line for the sustainable manufacture of the PURe® system.
- Efficient grey-water recovery system in our factory recycles water used in the manufacturing process.
- A biomass boiler heats our warehouse and is fuelled by waste timber from wooden packaging.
- We've invested in a five-star eco delivery fleet and on-site electric car charging points for staff and visitors.





Closed-loop recyclability





OUR PRODUCTS

**A suite of innovative and inspirational
windows to suit any application.**



SPW600e:

A popular choice combining high performance with versatility; flexible, reliable and proven.

SPW600e aluminium window

One of our most established and trusted systems, our versatile SPW600e aluminium window is a popular choice for a wide variety of projects. Robust, thermally-efficient and available in a large range of window styles. Thanks to our in-house powder-coating facility, it can also be specified in both single and dual colour options.

A cost-effective choice, designed to be durable and easy to maintain

Double or triple glazing options available, up to 56mm, to maximise thermal and acoustic performance

A three chamber, 75mm deep system benefitting from a polyamide thermal barrier

SPW600
WINDOW SYSTEMS





SPW600e key features

SPW600e is a three chamber, 75mm deep, polyamide thermally broken aluminium window system available in a variety of styles and in both single or dual colour.

The system has been fully weather and security tested to meet various design and performance requirements.



Thermal performance

Featuring a high-quality polyamide thermal barrier to offer low U-values and achieve BFRC ratings.



BREEAM®

Contributes to a positive BREEAM rating*

*dependent on specific product and configurations.

**all calculations are based on the CEN sized windows at 1230mm x 1480mm.



Technical

Fully weather and security tested, offering reliable performance and design flexibility.

Weather Rating (Casement option) BS6375 part 1

Air permeability	600 Pa
Water tightness	600 Pa
Wind resistance	2400 Pa

Average U-values (Casement option)

Commercial CEN Standard

Double glazed unit	1.5 W/m²K
Triple glazed unit	1.1 W/m²K

Flexible glazing sizes available



Testing

PAS24, BS6375-2 and BS6375-3

Safety and security



Secured by Design



Official Police Security Initiative

Acoustic Performance

A **47dB** reduction is achievable*



*IGU dependant based on CEN sized window

Please contact us to discuss your specific requirements

SPW600e options and sizing

The SPW600e can be specified in a wide range of window styles including:

- Open out casement (top and side hung)
- Inward opening tilt and turn
- Reversible overswing
- Automatic opening vent (powered)

Offering excellent design flexibility, the system is also able to receive glass and infill panels between 28mm and up to 56mm thick depending on the configuration.



SPW600e tilt and turn
Practical solution for controlled ventilation
Typical size: W1500 x H2400mm



SPW600e overswing
Reversible for ease of maintenance
Typical size: W1500 x H1738mm



SPW600e casement
Traditional top hung window
Typical size (top hung): W1500 x H1500mm
Typical size (side hung): W1000 x H1500mm

Sizes shown are indicative and larger spans may be possible, speak to us about your specific project.



PURe®:

Impressive thermal performance and stylish looks, PURe® windows are ideal for both commercial and domestic use.

PURe® aluminium window

Our most thermally-efficient window system to date, the PURe® aluminium window system has been widely specified as part of numerous education framework contracts as well as on large scale residential schemes. Its unique patented PUR thermal barrier offers exceptionally low U-values and with a wide range of styles to choose from, the PURe® window is both sustainable and stylish.

Sustainable and built to last, with a long life expectancy

Double or triple glazing options available, up to 57mm, depending on the system, to maximise thermal and acoustic performance

An established aluminium window solution for Part L compliance

Benefiting from a thermal barrier made from expanded polyurethane (PUR), tried and tested and used in the construction industry for many years

PURe®
WINDOW SYSTEMS

PURe[®] key features

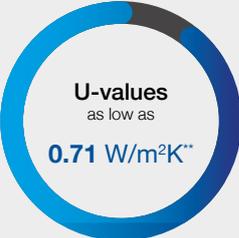
The PURe[®] window system uses an innovative, enhanced thermal barrier manufactured from expanded polyurethane (PUR) allowing ultra-low U-values to be achieved.

Offering great design flexibility, the system is available pre-finished in an almost unlimited range of colours and finishes both inside and out.



Thermal performance

Impressive thermal performance and stylish looks, PURe[®] windows are ideal for both commercial and domestic use.



U-values
as low as
0.71 W/m²K**



BREEAM[®]
Contributes to a positive BREEAM rating*

Window Energy Rating



*dependent on specific product and configurations.
**all calculations are based on CEN sized windows at 1230mm x 1480mm ±25%.



Technical

With a life expectancy up to 40 years, the PURe[®] window range is efficient, secure and suitable for a wide range of projects.

Weather Rating (Casement option)

BS6375 part 1

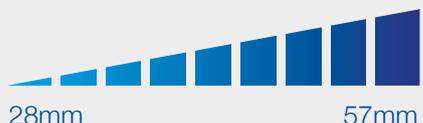
Air permeability	600 Pa
Water tightness	600 Pa
Wind resistance	2400 Pa

Average U-values (Tilt & turn option)

Commercial CEN Standard

Double glazed unit	1.1 W/m²K
Triple glazed unit	0.71 W/m²K

Flexible glazing sizes available



28mm
57mm

Testing

PAS24, BS6375-2 and BS6375-3

Safety and security



Secured by Design



Official Police Security Initiative

Acoustic Performance

A **43dB** reduction is achievable*



*IGU dependant based on CEN sized window

Please contact us to discuss your specific requirements



PURe® options and sizing

The PURe® window system is available in a choice of styles including:

- Open out casement (top and side hung)
- Inward opening tilt and turn
- Reversible overswing
- Parallel push
- Inline sliding

The system is also able to receive double or triple glazing up to 57mm for maximum thermal and acoustic performance.



PURe® tilt and turn
Practical solution for controlled ventilation
Typical size: W1500 x H2400mm



PURe® overswing
Fully reversible for easy maintenance and cleaning
Typical size: W1500 x H1738mm



PURe® casement
Traditional top hung or side hung window
Typical size (top hung): W1500 x H1500mm
Typical size (side hung): W1000 x H1500mm



PURe® parallel push
Providing safe ventilation and a uniform façade design
Typical size: W1500 x H2400mm

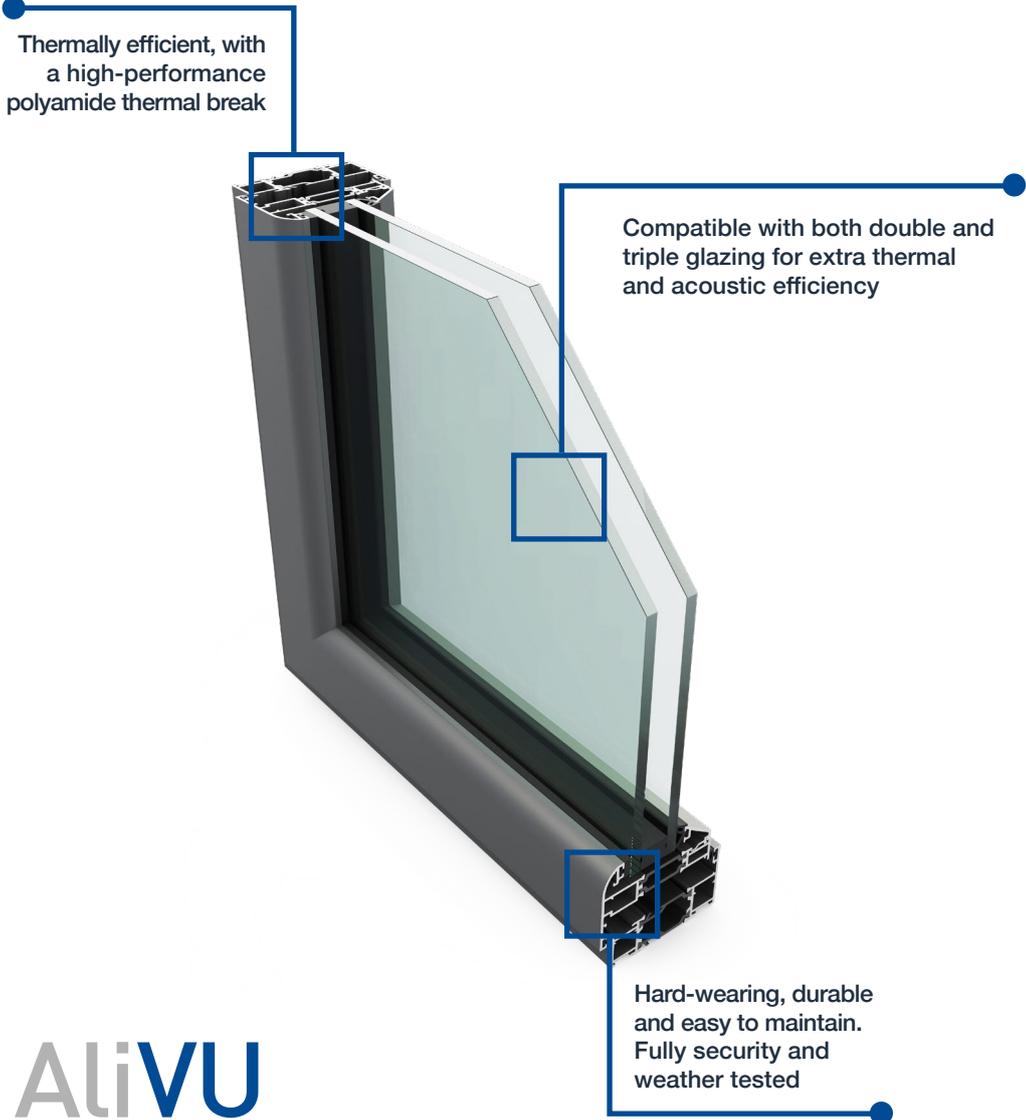
Sizes shown are indicative and larger spans may be possible, speak to us about your specific project.

Ali VU:

An attractive, slimline and cost-effective replacement for heritage style steel windows.

Ali VU

Ideally suited to both light commercial and residential buildings, the Ali VU aluminium window system can also be used as an attractive and cost-effective replacement for heritage style steel windows. Featuring a polyamide thermal break for impressive thermal efficiency, the sleek design of the window also gives slim sightlines and wider views.





Ali VU key features

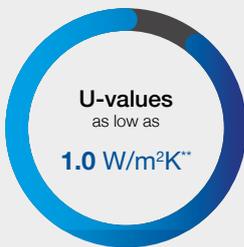
Ali VU is a super slimline aluminium window with a polyamide thermal break giving impressive thermal efficiency. Ali VU is also

perfect as a modern, energy efficient replacement for heritage style steel windows in both commercial and residential buildings.



Thermal performance

The high performance polyamide thermal break can achieve U-values as low as 1.0 W/m²k when calculated as a commercial CEN standard window.



BREEAM[®]

Contributes to a positive BREEAM rating*

*dependent on specific product and configurations.

**all calculations are based on CEN sized windows at 1230mm x 1480mm.

Window Energy Rating



Technical

Available with a host of design options, Ali VU is the secure and efficient way to achieve the widest views and maximise daylight in every room.

Weather Rating (Casement option) BS6375 part 1

Air permeability	600 Pa
Water tightness	600 Pa
Wind resistance	1600 Pa

Testing

PAS24, BS6375-2 and BS6375-3

Average U-values (Casement option)

Commercial CEN Standard

Double glazed unit	1.4 W/m ² K
Triple glazed unit	1.0 W/m ² K

Safety and security

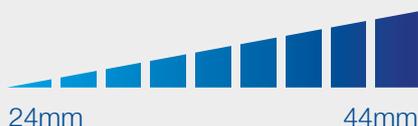


Secured by Design



Official Police Security Initiative

Flexible glazing sizes available



Key features



Durable and easy to maintain, with a long life expectancy



Available in an almost limitless range of colours and finishes

Please contact us to discuss your specific requirements



Ali VU options and sizing

The Ali VU window can be specified in a wide range of window styles including:

- Ali VU casement (top and side hung)
- French window
- Internally and externally glazed
- Ovolo and Ovolo flush

The system is able to receive double or triple glazing from 24-36mm on the radius and stepped vent and from 24-44mm on fixed outerframe and flat faced vents for maximum thermal and acoustic performance.



Ali VU casement

Traditional top hung or side hung window

Typical Size (top hung): W1400 x H1400mm

Typical Size (side hung): W950 x H1400mm



Ali VU french window

Elegant design for wider openings

Typical Size (side hung): W950 x H1400mm

Sizes shown are indicative and larger spans may be possible, speak to us about your specific project.



CASE STUDIES

**Senior's aluminium windows
have transformed projects both
large and small throughout the UK.**



Grantley Hall, Ripon

The stunning Grade II listed building has been sympathetically repaired, renovated and extended to provide luxury hotel accommodation and a new build spa and wellness retreat. A key challenge of the project was to minimise the impact of the new extension on the existing listed building which

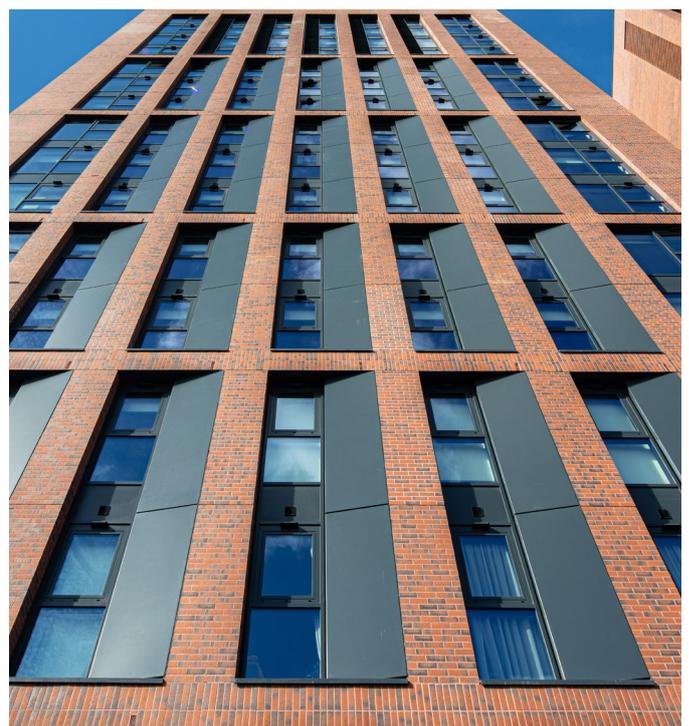
dates back to the 17th century. With all the original windows in the hall restored to their former glory, it was vital that the fenestration package in the new spa building was appropriate in terms of both aesthetics and performance and our patented low U-value PURe® aluminium windows were the ideal choice.



Arundel House Student Accommodation, Coventry

To help create a safe, secure and comfortable environment for students, this accommodation scheme in Coventry features both the patented low U-value PURe® aluminium windows and PURe® commercial doors. Comprising a mix of studio and en-suite apartments,

the stylish fenestration package also features the thermally-efficient SF52 aluminium curtain wall system to help further reduce energy bills and maintenance costs.



Brixton Hill Academy London

Comprising three separate colleges, the new campus at Brixton Hill in Lambeth was subject to strict planning requirements owing to its close proximity to the neighbouring Grade II Corpus Christi Church. Designed to complement the aesthetics of the local architecture and meet the performance demands of

a modern educational facility, the new-build five-storey campus features low U-value PURe® aluminium windows. The scheme is one of several educational framework contracts completed with main contractor Willmott Dixon.



Brae House Student Accommodation, Edinburgh

Created for the University of Edinburgh, this student accommodation scheme boasts a prime location close to the city's famous Royal Mile. To provide an energy efficient and low maintenance solution, SPW600 aluminium windows were specified throughout.

The tall style of the window openings creates a contemporary feel for the building, with the slim aluminium frames complementing the traditional blonde sandstone façade.

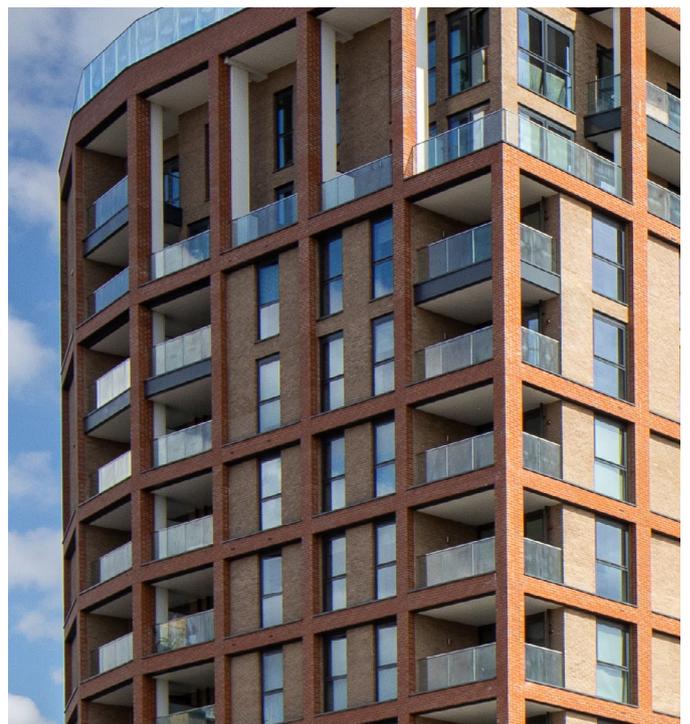


Williamson Heights, Wembley

SPW600
WINDOW SYSTEMS

Developed by renowned housing association Peabody, the Williamson Heights residential development in Wembley, North London features a stunning fenestration package which includes SPW600 thermally-broken

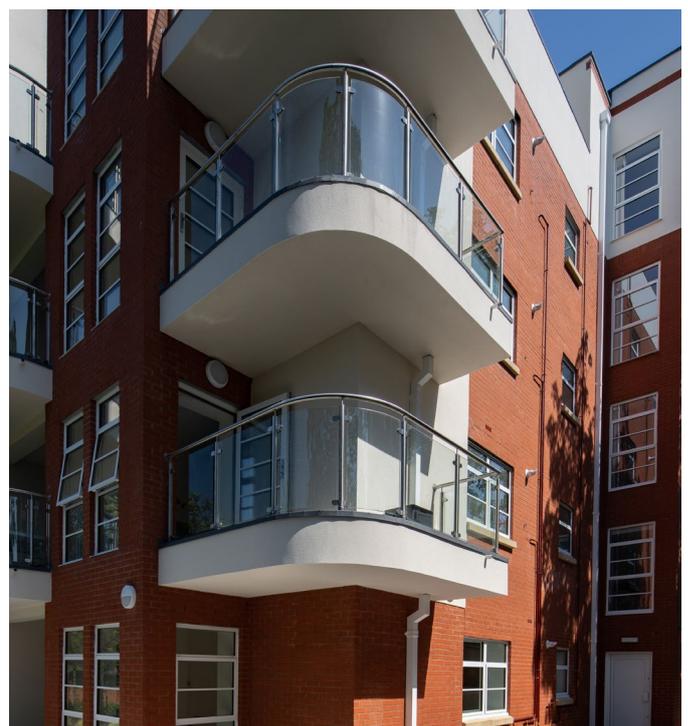
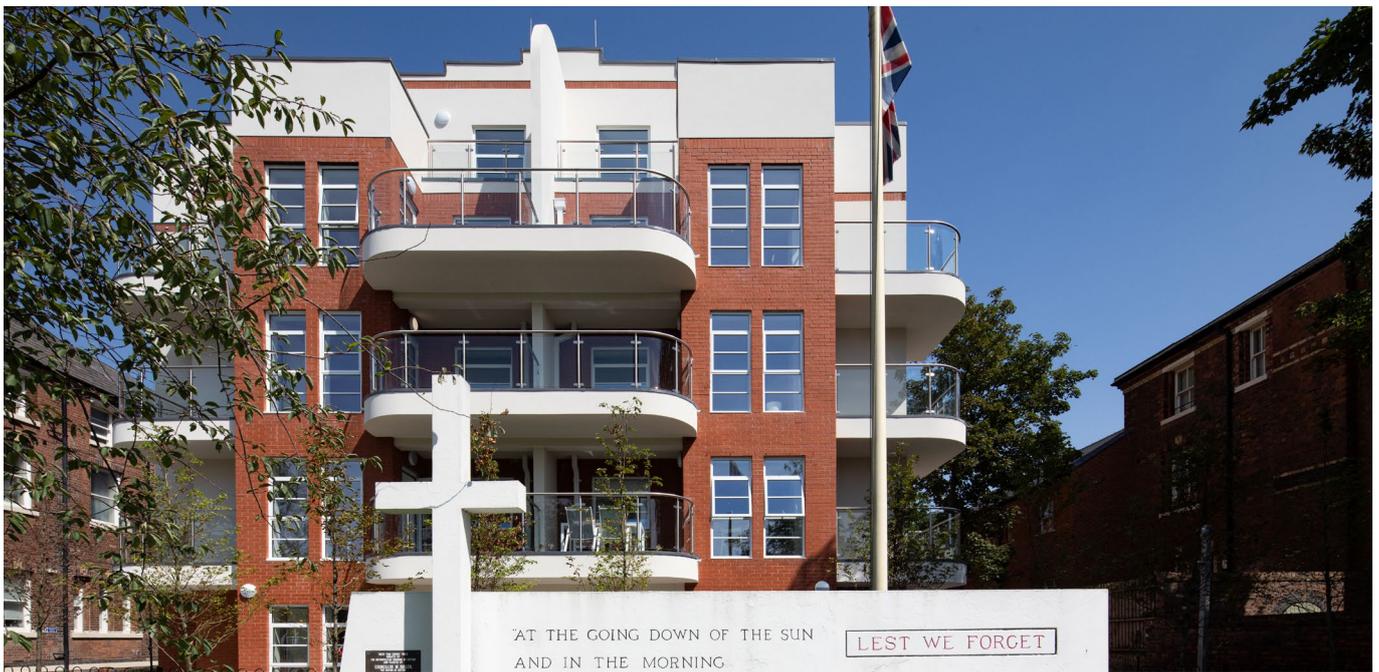
aluminium windows and complementary balcony doors. The high-rise scheme also features SF52 aluminium curtain wall screens and SPW501 commercial doors to the main communal entrances.



Lister Gardens, Merseyside

The five-storey Lister Gardens apartment scheme in Crosby has been inspired by the art deco style of the area's architecture and in particular, the former Royal British Legion building nearby. The scheme comprises 20 one and two-bedroom apartments, all benefitting

from the attractive slim sightlines offered by Ali VU casement windows. As well as successfully emulating the look of heritage style windows, the Ali VU system offers a range of contemporary features including excellent energy-efficiency, security and durability.



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Window solutions



PROUD TO BE
UK OWNED

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