



# The complete answer to window systems

High performance window solutions for new and refurbished buildings



SENIOR **ALUMINIUM** SYSTEMS™



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# window systems that bring environments to life

Senior Aluminium Systems, part of Senior Architectural Systems' family of fenestration solutions, offers a comprehensive range of window products for commercial and residential applications.

Senior supplies innovative window systems to both commercial and residential construction markets. From dedicated ISO 9001 quality accredited service centres in England, Wales and Scotland, Senior prides itself on providing a responsive and personal customer service with local availability, and on forming long term, mutually profitable relationships with specifiers and fabricators.

# the Senior window difference

All our window products are designed with meticulous attention to detail and are available either in aluminium, Hybrid timber/aluminium composite and fibreglass.

Privately-owned, the ongoing mission at Senior Architectural Systems is to offer high performance window solutions to meet the needs of each project so that the fabricator is competitive and the client is totally confident.

## *Options:*

*Hinged Lights  
Pivot  
Tilt/Turn  
Vertical Slider  
Parallel Push  
Overswing  
Frameless  
Single Glazed  
Double Glazed  
Triple Glazed  
Opening Restrictions  
Dual Colour  
Oak/Spruce/Painted  
/Lacquered*

## *Features:*

*Thermal Performance  
Slim Sightlines  
Long Warranties  
Automation Compatible  
BMS Friendly  
Low U-Values  
A-Rating  
Ergonomic Hardware  
Envelope/Interface  
Compatible*

## *Testing:*

*Weather Tested  
Security Tested*



# material systems

Senior Architectural Systems offer specifiers and fabricators a wide range of stocked profiles which can be finished in-house to meet site requirements. The highest quality materials are chosen on the basis of responsible sourcing and high recyclability.

Our mission at Senior Aluminium Systems is to offer high performance aluminium glazing systems to meet the needs of every project.



SENIOR **ALUMINIUM** SYSTEMS™

The original and trusted high insulation timber and aluminium composite solution. Developed, manufactured and supplied in the UK.



SENIOR **HYBRID** SYSTEMS™

An innovative range of fibreglass windows and doors, offering impressively high performance and strength alongside class-leading acoustic ratings.

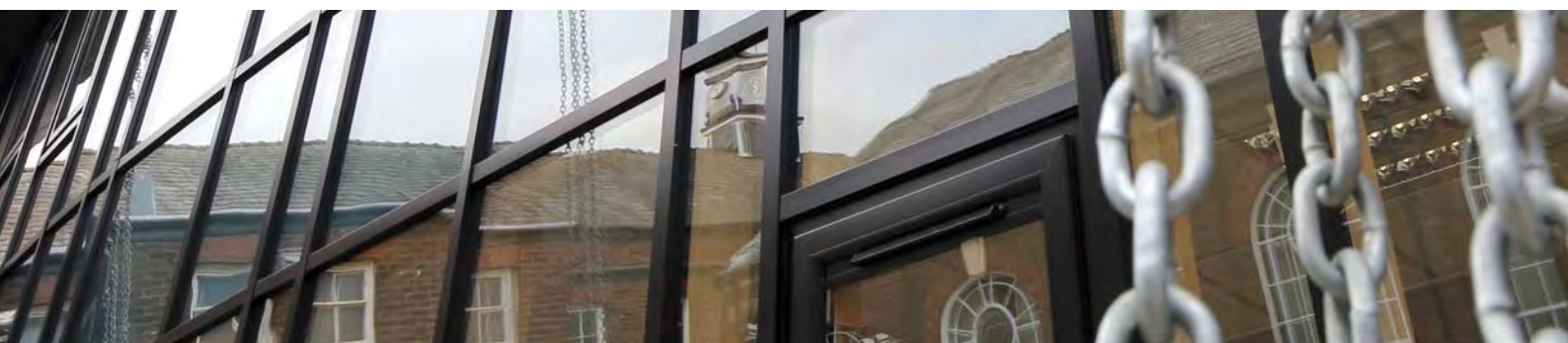
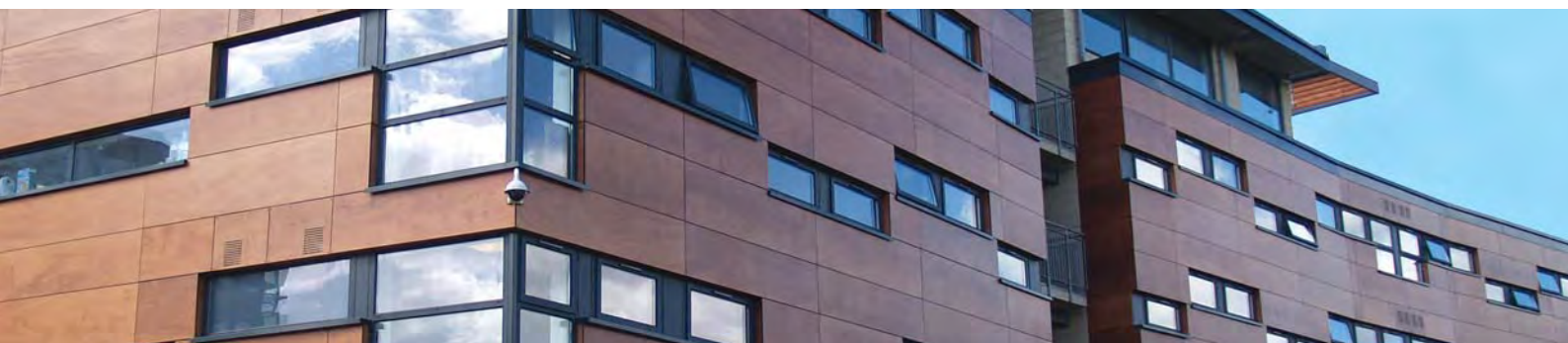


SENIOR **FIBRE** SYSTEMS™

Senior Glass Systems offer high performance glazing products to meet the needs of all new and refurbishment projects.



SENIOR **GLASS** SYSTEMS™



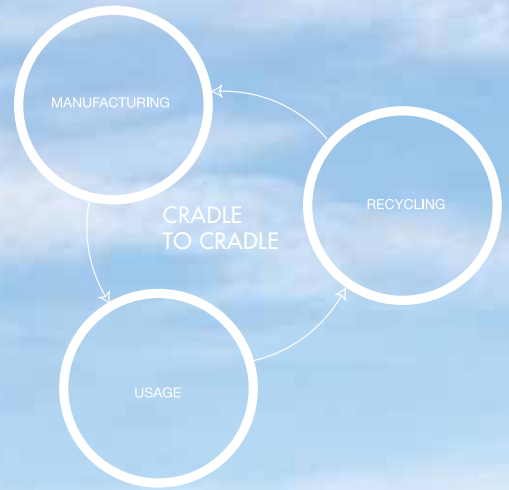
# taking the environment seriously

After more than two decades in business we are well known for our down-to-earth cooperative approach. Fabricators, architects and contractors around the UK tell us that's why they choose to deal with Senior rather than anyone else.

As well as being totally committed to customer service, we actively work with a green agenda, demonstrating our commitment to the environment for now and future generations.

We minimise the risk of any chemical releases during production and our systems in aluminium, wood, glass and fibreglass are perfect for producing low maintenance, energy efficient windows and façades that have a long life.

Our metal of choice is aluminium. It recycles perfectly without losing any of its properties. And best of all for our planet, we make sure that our suppliers of wood always plant more trees than we use.







# helping you achieve **BREEAM<sup>®</sup> credits**

## **What is BREEAM?**

BREEAM (Building Research Establishment's Environmental Assessment Method) is the world's foremost environmental assessment method and rating system for buildings, with 250,000 buildings with certified BREEAM assessment ratings and over a million registered for assessment since it was first launched in 1990. The system sets the standard for best practice in sustainable building design, construction and operation.

## **Ten categories for a sustainable building**

A BREEAM assessment uses recognised measures of performance, set against established benchmarks, to evaluate a building's specification, design, construction and use.

Credits are awarded across ten categories based on the outcomes of the building assessed. The credits are then combined to provide a single score, achieving either a Pass, Good, Very Good, Excellent or Outstanding overall BREEAM rating.

## **Senior and BREEAM**

Senior Architectural Systems product range has been developed with BREEAM at its centre. Our systems are proven to help you achieve a credible BREEAM rating. With many BREEAM rated projects already successfully utilising Senior products, we have a wealth of experience to assist the architect/designer in meeting their sustainability goals.



Categories	Credits Available	Senior Architectural products impact
Management	11	No
Health & Wellbeing	14	Yes
Energy	24	Yes
Transport	9	No
Water	9	No
Materials	13	Yes
Waste	7	Yes
Land Use & Ecology	10	No
Pollution	12	No
Innovation	10	Yes
<b>Total</b>	<b>119</b>	

# aluminium window systems



Senior Architectural Systems provides high performance window solutions for new and refurbished buildings.

The systems have been developed and tested to suit most environments. Educational, commercial and retail applications, transport terminals and health service buildings are just a few of the markets in which Senior Architectural Systems has a well earned reputation for service, quality, delivery and technical support.



### Overview

Five systems are available, SPW300 medium to high thermal performance, SPW600 high thermal performance, SPW600e enhanced high thermal performance, SMRF frameless casement window and SMRFP parallel push window.

Senior's extensive suite of profile designs is constructed from environmentally friendly aluminium and responsibly sourced timber and is supplied with comprehensive product and finish warranties.

Each and every component is stocked and fabricated locally, allowing us to provide responsive delivery and lower transportation costs, as well as benefitting the environment by keeping our carbon footprint to a minimum.

Senior window systems are designed for and focused on the UK and Irish market, achieving industry leading U-values which conform to UK architecture and Building Regulations. We are able to react to any last minute design changes, giving you greater control.

Depending on the system selected, glazing can range from a 4mm single pane to 56mm double glazed units. By varying the glazing specification and system/profile selection, high insulation and specific overall U-values can be achieved.

### Flexibility

The majority of our window ranges are compatible with other Senior products. All are available in single or dual colour finish, anodised or mill finish.

Dependent on the range specified, Senior systems are available as casement, tilt and turn, top swing reversible and pivoting windows.

A full range of window hardware is available, including cockspur handles, friction stays, folding cam openers, tilt and turn gearing, overswing gearing, pivots and espagnolette locking for added security, including solutions to meet SBD (Secured by Design) criteria.

### Powder coating

With a dedicated colour coatings division, which is one of the UK's largest, Senior provides a single source solution. Featuring state-of-the-art vertical and horizontal lines and a fully accredited integral pre-treatment facility, Senior offers a cost-effective, highly efficient and time-sensitive turnaround service.



### Options

Senior windows are available in a wide selection of configurations.

Hinged Lights. Fixed Lights. Pivot. Tilt/Turn. Parallel Push. Overswing. Frameless. Single/Double/Triple Glazed. Opening Restrictors. Dual/Single Colour. Anodised. Mill finish.

### Environmental

The aluminium window range, when used on projects involved in a BREEAM assessment, or within the Code for a Sustainable Built Environment and the Code for Sustainable Homes, can offer significant benefits. For project specific assistance, please contact our specification team.

### Independent testing

Senior Architectural Systems is fully compliant with BS EN ISO 9001, BS EN ISO 14001 and OHSAS 18001 Standards.

Weather tested to BS6375.

### Technical support

For detailed information on weather ratings, U-values and any other technical matter, please contact our technical department:

[support@seniorarchitectural.co.uk](mailto:support@seniorarchitectural.co.uk)  
or call, +44 (0)1709 772 600



## aluminium window systems

/SPW300  
/SPW600  
/SPW600e  
/SMRF  
/OMDF

### **SPW300**

The SPW300 window is a thermally broken polyamide window system that achieves good thermal U-values. It has a slim sightline, a wide variety of window styles and is available single or dual colour.

### **Configurations**

- / Open Out Casement (Top or Side-hung)
- / Inward Opening Tilt/Turn
- / Overswing
- / Pivot
- / Fixed Light



### **SPW600**

SPW600 is a three chamber 75mm polyamide thermally enhanced window system offering versatility (wide variety of window styles) and is available in single or dual colour.

### **Configurations**

- / Open Out Casement (Top or Side-hung)
- / Inward Opening Tilt/Turn
- / Overswing
- / Fixed Light



### **SPW600e**

SPW600e offers further thermal improvement to the SPW600 range, achieving improved BFRC ratings.

### **Configurations**

- / Open Out Casement (Top or Side-hung)
- / Inward Opening Tilt/Turn
- / Overswing
- / Parallel Push
- / Fixed Light



### **SMRF**

SMRF is a flush glazing solution with no framework visible on the external façade. For use in curtain wall applications.

### **Configurations**

- / Open Out Casement (Top or Side-hung)
- / Parallel Push

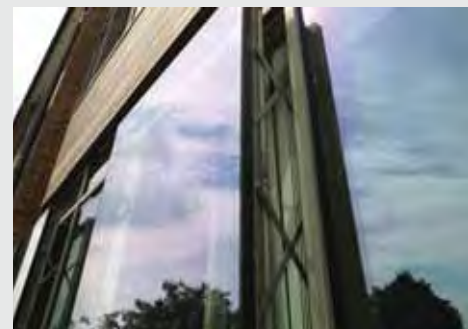


### **SMRFP**

SMRFP is a parallel action window allowing free air to all four sides of the window.

### **Configurations**

- / Open Out Parallel





# hybrid window systems



The original and trusted timber/aluminium composite solution. Manufactured and supplied in the UK, Hybrid is a high insulation composite timber and aluminium window range, complemented by a matching door and curtain wall system.

Hybrid combines the advantage of the long life and low maintenance of aluminium externally with the high insulation, environmentally focused benefits of responsibly sourced engineered timber internally.





### Overview

The Hybrid family consists of the Series 1 range of traditional composite windows and Series 2, a contemporary collection of commercial slimline windows.

Hybrid combines the advantage of the long life and low maintenance of aluminium externally with all the benefits of engineered timber internally. The product is designed and manufactured within the UK, and is fabricated by a fully trained network of UK companies. The range meets and exceeds all current standards, making it an ideal solution for both new-build and refurbishment projects where site measurement is required.

### Flexibility

Dependent on the range specified, Senior systems are available as casement, tilt/turn, flush casement and overswing windows.

A full range of window hardware is available, including cockspur handles, friction stays, folding cam openers, tilt and turn gearing, overswing gearing, pivots and espagnolette locking for added security, including solutions to meet SBD (Secured by Design) criteria.

### Colours and finishes

Externally, choose from any RAL colour, to complement and bring out the best in any application. Internally, Hybrid can be specified in natural spruce, traditional oak or painted.



### Options

Senior windows are available in a wide selection of configurations.

Hinged Lights. Fixed Lights.  
Tilt/Turn. Flush Casement.  
Overswing. Single/Double/Triple Glazed.  
Opening Restrictors. Single Colour.  
Oak/Spruce/Painted/Lacquered.

### Environmental

The Hybrid window range, when used on projects involved in a BREEAM assessment, or within the Code for a Sustainable Built Environment and the Code for Sustainable Homes, can offer significant benefits. For project specific assistance, please contact our specification team.

### Independent testing

Senior Architectural Systems is fully compliant with BS EN ISO 9001, BS EN ISO 14001 and OHSAS 18001 Standards.

Weather tested to BS6375.

### Technical support

For detailed information on weather ratings, U-values and any other technical matter, please contact our technical department:

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hybrid window systems

/SERIES1  
/OPEN OUT  
/INWARD  
/TILT/TURN  
/OVERHANGING



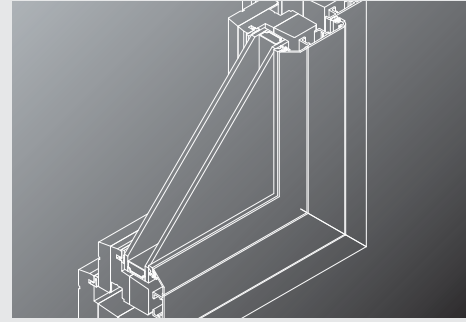
### Series 1

Hybrid Series 1 is a range of timber aluminium composite windows and doors. All timber is sustainably sourced and is PEFC certified. Series 1 offers flexible design, with the suite of windows and doors able to be used independently or together and also in combination with the Hybrid Series 3 curtain wall system (CWCT certified).

For more information on the types and configurations of Hybrid doors available please consult our 'complete doors' brochure

### Configurations

- / Open Out Casement (Top or Side-hung)
- / Inward Opening Tilt/Turn
- / Overswing
- / Open Out Flush Casement (Top or Side-hung)
- / Fixed Light



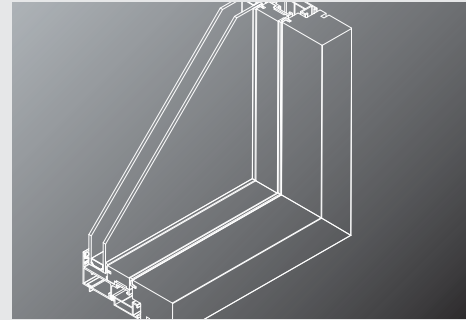
### Series 2

Hybrid Series 2 is a timber aluminium composite window range offering slim sightlines for fixed and opening elements.

The range is compatible with all other Hybrid products and systems for complete design flexibility.

### Configurations

- / Open Out Casement (Top or Side-hung)
- / Thermally broken Open Out Casement (Top or Side-hung)
- / Fixed Light



# fibre window systems



Senior Fibre Systems, part of Senior Architectural Systems' family of fenestration solutions, encompasses an innovative range of fibreglass windows and doors, offering impressively high performance and strength.



### Overview

The Senior Fibre Systems' window range is environmentally friendly and boasts superior energy efficiency without the need for thermal breaks. The interface between fibreglass frame and glazing - different forms of the same material - means the system performs in perfect harmony, which leads to stability and long life. Being manufactured from fibreglass profiles, the windows and doors are also fully repairable.

It's an ideal solution where security is a key consideration and a substantial lifespan is a commercial necessity.

### Flexibility

Dependent on the range specified, Senior fibre window systems are available as casement, tilt and turn, and vertical sliding.

A full range of window hardware is available, including cockspur handles, friction stays, folding cam openers, tilt and turn gearing, overswing gearing, pivots and espagnolette locking for added security.



### Options

Senior windows are available in a selection of configurations.

Hinged Lights. Fixed Lights.  
Vertical Slider. Double Glazed.  
Opening Restrictors. Single/Dual Colour.

### Environmental

The fibre window range, when used on projects involved in a BREEAM assessment, or within the Code for a Sustainable Built Environment and the Code for Sustainable Homes, can offer significant benefits. For project specific assistance, please contact our specification team.

### Independent testing

Senior Architectural Systems is fully compliant with BS EN ISO 9001, BS EN ISO 14001 and OHSAS 18001 Standards.

Weather tested to BS6375.

### Technical support

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fibre window systems

/SYSTEM300  
/SYSTEM325  
/SYSTEM9000



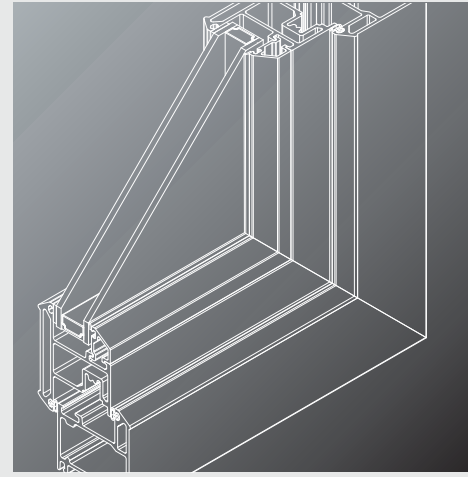
### **System 300**

The System 300 window has a 60mm profile offering excellent thermal properties without the need for additional thermal breaks. It is easily repairable and available in single or dual colour.

A range of door options are also available.

### **Configurations**

- / Open Out Casement (Top or Side-hung)
- / Inward Opening Tilt/Turn
- / Fixed Light

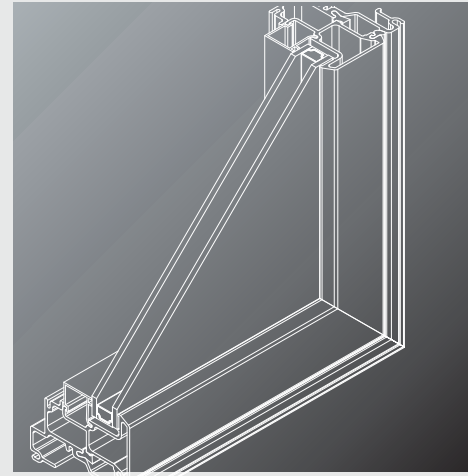


### **System 325**

A slim fibreglass casement window system with a unique operating mechanism and optional fly screen. It has an 83mm profile offering excellent thermal properties without the need for additional thermal breaks. The slimline sash profile means only the bead is visible from the inside resulting in a 72mm sightline on the opening vent. It is available in single or dual colour.

### **Configurations**

- / Open Out Casement (Top or Side-hung)
- / Fixed Light



### **System 9000**

The System 9000 vertical slider has an 83mm profile offering excellent thermal properties without the need for additional thermal breaks. The double sided panels also tilt inwards for ease of cleaning and maintenance. It is available in single or dual colour.

### **Configurations**

- / Vertical Slider



# glazing systems



Complementing Senior Architectural Systems' portfolio of high quality products, Senior Glass Systems contributes to the group's total fenestration solution by producing quality, high specification insulated glass units.





### Overview

Senior Glass Systems provide high performance glazing solutions for new and refurbished buildings.

The comprehensive range of products have been developed to suit most environments, including educational establishments, commercial and retail applications, transport terminals and health service buildings.

From its dedicated 40,000 sq.ft. base in Scarborough, Senior Glass Systems manufactures a broad range of thermally efficient glazing solutions using high performance products from leading suppliers.

The company aims to source materials from local suppliers wherever possible. A host of real-life energy saving initiatives, such as heating via warm air from the toughening furnace, and recycling waste glass and grey water, underlines Senior Glass Systems strong environmental stance.

### Technology

An in-house high-technology toughening furnace allows Senior Glass to toughen most glass types, sizes and thicknesses, ensuring complete control of the production process. Senior Glass Systems utilises Edgetech's Super Spacer® TriSeal™ systems to generate improved U-values, curtail noise transition and dramatically reduce seal failures.

### Products

Our wide range of products includes insulated vision glass units, non-vision panels and toggle glazed units, all of which can be manufactured from almost any glass available in the UK, from solar control to acoustic laminate. To meet the requirements of CE Marking, all glass supplied is in accordance with EN 1279-5 and EN 12150-2. Declarations of performance are available upon request.

### End-to-end solution

Backed by an investment in one of the most advanced and streamlined manufacturing plants in the UK, Senior Glass Systems provides a turnkey, time-sensitive, cost-effective and reliable solution to glazing requirements, from initial order through to delivery to site using its own fleet of vehicles.

### Products

Insulated Vision Glass Units. Toggle Glazed Units. Non-Vision Panels.

All products can be manufactured from almost any glass available in the UK, from solar control to acoustic laminate. Please contact us to discuss your particular requirement.

### Environmental

Senior Glass products, when used on projects involved in a BREEAM assessment, or within the Code for a Sustainable Built Environment and the Code for Sustainable Homes, can offer significant benefits. For project specific assistance, please contact our specification team.

### Independent testing

Senior Glass Systems is acutely conscious of quality, and is working towards BS EN ISO 9001, BS EN ISO 14001 and BS EN ISO 18001 certification. All glass is supplied in accordance with EN 1279-5 and EN 12150-2. Declarations of performance available upon request.

### Technical support

For detailed information on weather ratings, U-values and any other technical matter, please contact our technical department:

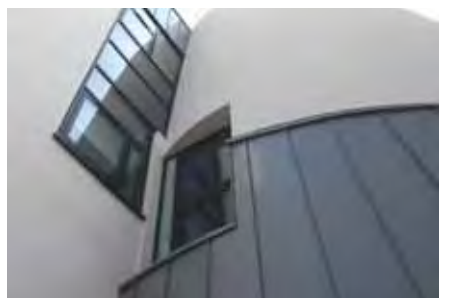
[ordering@seniorglass.co.uk](mailto:ordering@seniorglass.co.uk)  
or call, +44 (0)1723 580 010



Case study | Research  
**Cancer & Genetics  
Centre, Cardiff**

*SCW+ curtain wall  
SPW300 casement windows  
SD Doors*

The wonderfully innovative design of the Cancer & Genetics Centre at Cardiff features striking fixed louvers to keep the south facing research laboratories cool and are colour coded to correspond to the sequence of the TSC2 gene. The gene was discovered by the Cardiff researchers as one that causes tuberous sclerosis, an inherited disorder associated with kidney, brain and other tumours.



BREEAM rating 'Very Good'



Case study | Education  
**Stourbridge College**  
West Midlands

SCW curtain wall  
SPW300 windows

The cutting edge and bold architectural design for this 3,800m<sup>2</sup> three-storey building, featuring dramatic angles and a vast frontage, incorporates Senior Architectural Systems' powder coated aluminium range of curtain wall and window systems. The glass fronted atrium forms a gallery showcase for exhibiting college sculpture and artwork. Dominating the skyline on the former Brier School site at Brierley Hill, and backing onto the Dudley Canal, the building is set at the front of the site leaving space for further development as future funding allows.



BREEAM rating 'Excellent'



Case study | Commercial  
**The Venture Building  
Glasgow**

*Hybrid Series 3 curtain wall  
Hybrid Series 1 flush  
casement windows*

The Venture Building was designed and constructed to an 'Excellent' BREEAM rating and provides flexible open plan and laboratory accommodation with a stunning three storey atrium with feature bridge link. Designed to be naturally ventilated in accordance with CIBSE guidelines with generous floor to ceiling heights, it uses Senior Architectural Systems' Hybrid timber composite windows and curtain walling, giving a contemporary, well designed and airy feel.





Case study | Research  
**Vestas, Isle of Wight**

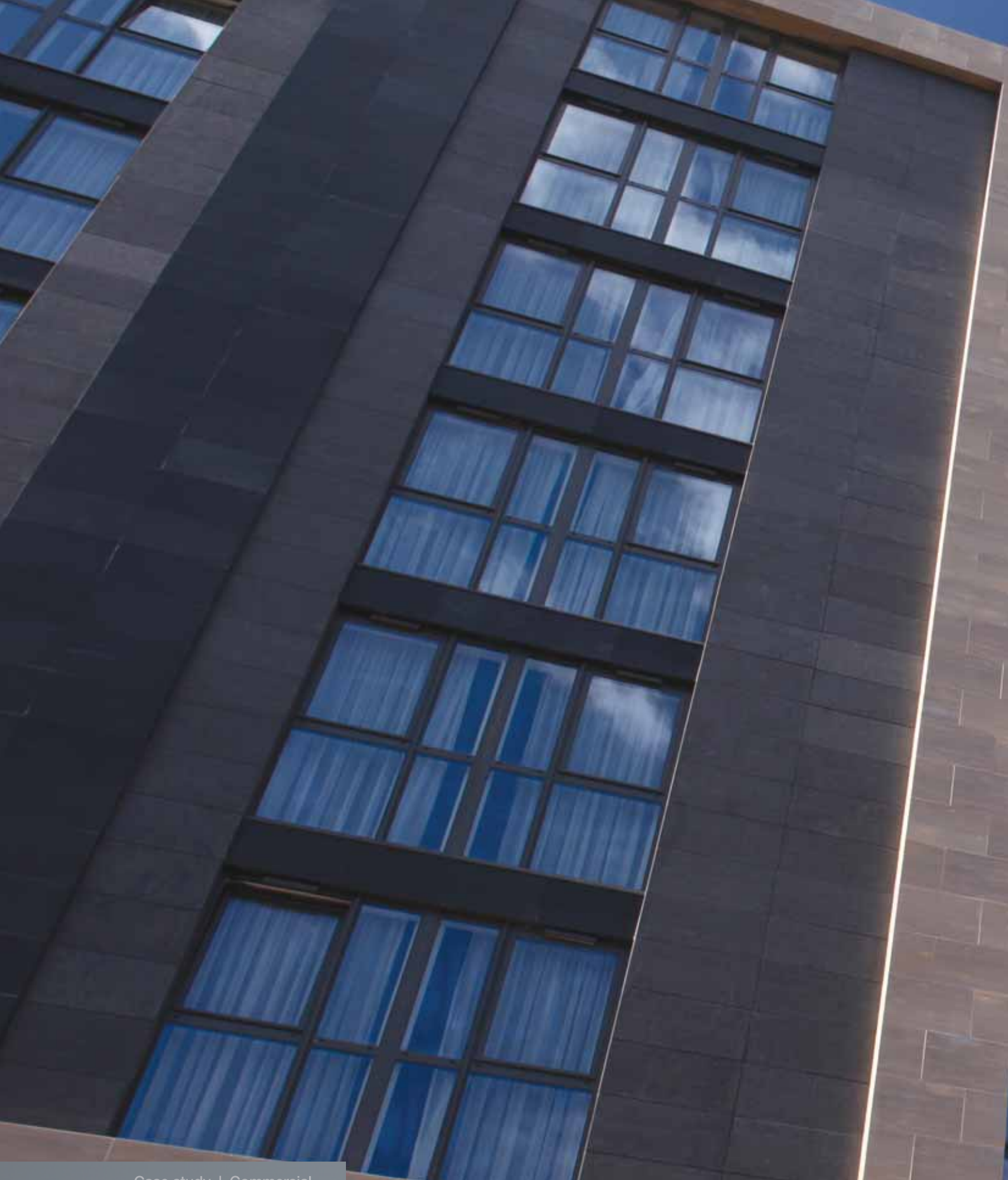
*Hybrid Series 3 curtain wall  
Hybrid windows*

Danish firm Vestas has invested £56 million in its new wind turbine blade research facility on the banks of the River Medina near Newport, Isle of Wight. At the time of construction it is the world's largest test facility providing cutting edge technology for material research and development.

The 28,000m<sup>2</sup> facility features a striking, energy-efficient three-storey cedar clad office block incorporating Senior's high insulation, Hybrid curtain wall and composite windows. The design is both aesthetically attractive and offers a high level of protection against the island's environment.







Case study | Commercial  
**Holiday Inn Express  
Sheffield**

*SPW600 casement windows  
SMR900 curtain wall*

The eight-storey 161-bed 'next generation' Holiday Inn Express Hotel, the first of its kind in any major UK city, is within walking distance of Sheffield city centre and overlooks the River Don. The £10 million landmark building on Blonk Street, features almost 200 windows fabricated from Senior Architectural Systems' aluminium range, which was chosen for its impressive performance results.



## HEAD OFFICE

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[www.seniorarchitectural.co.uk](http://www.seniorarchitectural.co.uk)



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Doncaster: 1996/026



Enhanced Security Window BS 7950  
**Certificate Number 068**  
Aluminium Windows BS 4873  
**Certificate Number 072**  
Enhanced Security Doorsets PAS 23 & 24  
**Certificate Number 088**



ALUMINIUM

HYBRID

FIBRE

GLASS



SENIOR ARCHITECTURAL SYSTEMS

Senior Architectural is a major UK supplier of fenestration solutions, specialising in providing aluminium, timber, glass and fibreglass glazing systems to the highest standards. This brochure is intended to show what makes Senior's unique and how our products and services can make a difference to customers, clients, their projects and the environment.

Whilst every effort has been made to ensure the accuracy of this publication, no responsibility for content is taken by Senior Architectural Systems Ltd. We strongly recommend the specification for any given application is checked with Senior Architectural Systems before an order is placed. Senior Architectural Systems reserves the right to alter any of the specifications given in this publication without prior notice due to a process of continual development.