



GLASS FOR FAÇADES

*Lower-carbon, higher-performance
flat glass*





HIGHER-PERFORMANCE FLAT GLASS FOR FAÇADES

Saint-Gobain Glass is part of the 360-year old Saint-Gobain Group; a global leader in lightweight and sustainable construction.

Saint-Gobain Glass UK & Ireland launched in 2000. The state-of-the-art flat glass production plant produces 250,000 tonnes of flat glass every year, using a fully automated process that features Industry 4.0 technology.

The business is focused on the development of sustainable glazing solutions, recovering and remanufacturing end-of-life glazing into new, lower-carbon, higher-performance flat glass using Glass Forever, a circular economy approach to flat glass recycling, pioneered by Saint-Gobain Glass in 2001.

Saint-Gobain Glass manufactures a range of coated glass products including PLANITHERM® low-emissivity (Low-E) glass and COOL-LITE® solar control glass. PLANITHERM® and COOL-LITE® products are higher performing than uncoated, flat glass substrates, based on emissivity level. Higher-performance, coated, flat glass, achieves an emissivity level of 3% or less, providing thermal insulation and reducing the risk of overheating, which can help create more energy efficient glazing solutions for residential and commercial buildings.

Saint-Gobain's higher-performance glass features in some of the world's most iconic buildings, including the UN building in Geneva, the Broad Museum in Los Angeles and Tower Bridge in London.

Visit:

saint-gobain-glass.co.uk

for more information.



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**SUSTAINABILITY
FIRST**



On 23 September 2019, during the United Nations Summit on Climate Change, we pledged that the entirety of the Saint-Gobain global group would undertake a transition towards achieving net-zero carbon emissions by the year 2050.

Saint-Gobain Glass has made a solid commitment to recycle and remanufacture flat glass, into new higher-performance glass, to create buildings that deliver on sustainability, performance and safety.

The business is partnering with companies involved in all areas of construction to lead the glass industry in the development of a robust, circular economy for flat glass.



A COMMITMENT TO A CIRCULAR ECONOMY FOR FLAT GLASS

Saint-Gobain Glass is an industry leader in the responsible reclamation and remanufacture of post-consumer glass. Crucially, our proactive Glass Forever cullet return programme, includes the recovery of post-consumer glass from old windows, which had typically been set to landfill.

In the face of the climate emergency, it is imperative to challenge existing business models to secure a more sustainable future for all inhabitants of our planet.

The Glass Forever programme sees our teams closely collaborate with our customers to ensure that, whenever possible, both pre-consumer and post-consumer glass is recycled; contributing to the production of higher-performance flat glass with minimal impact to quality. A circular economy for flat glass is possible as it is infinitely recyclable.

OBJECTIVE: TO USE 50% CULLET IN THE MANUFACTURE OF SAINT-GOBAIN GLASS BY 2025



Better glass quality
with the production
of optimised batches.

**Limit CO₂ and sulphur oxide
emissions released during the
production process.**

Using one tonne of cullet in place
of one tonne of raw materials can
reduce scope 1, 2 and 3 CO₂
emissions by

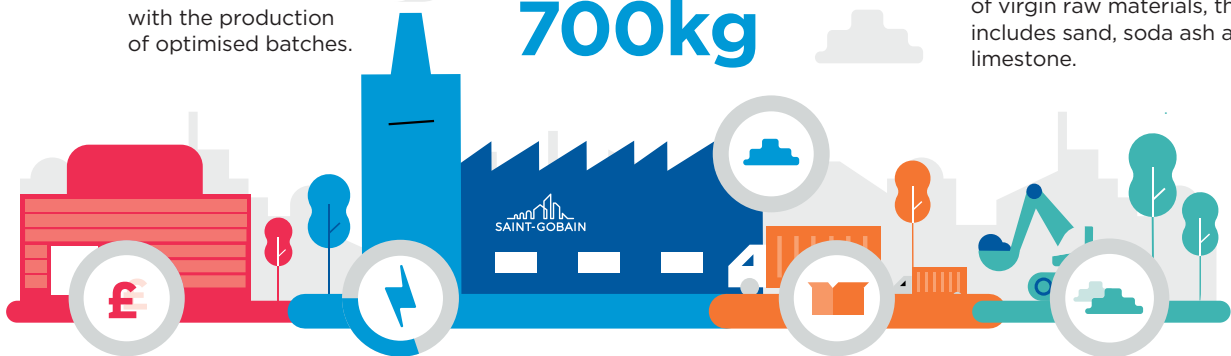
700kg

**Preserve natural resources
and biodiversity.**

For every one tonne of cullet
used, we can save up to

1200kg

of virgin raw materials, this
includes sand, soda ash and
limestone.



**Increased
competitiveness**
by meeting the market
demand for recycled
products.

30% **less energy is required**
in the furnace when melting
cullet than raw materials.

**Less requirement for
raw materials.**
Due to the demand and
scarcity of raw materials,
the price of these raw
materials is likely to rise.

The benefit of cullet use is based on a calculation which uses LCA level data representing all Saint-Gobain Glass European float lines producing flat glass.



GLASS FOREVER PROJECTS

**GLASS
FOREVER**



MORRISROE, MINERVA HOUSE, LONDON

Morrisroe, a leading specialist in demolition and enabling works in the UK, has worked with Saint-Gobain Glass to integrate a successful, glass recovery model into their workflow, when working on the Minerva House project, located next to the River Thames; contributing to better remanufacturing practices and positively, impacting the circular economy for flat glass.

Paul Moody, Operations Director at Morrisroe, highlighted the significance of the joint project, "Minerva House was chosen as the first collaboration because it provided the right amount of glass and challenges around recovery. Situated along the River Thames, the site presented logistical challenges, offering an opportunity for both teams to experiment, develop and implement learnings that can be extrapolated, and replicated in future joint projects with confidence."



KPH PROJECTS

KpH has returned in excess of 1000 tonnes of cullet to Saint-Gobain Glass, over a number of projects, to be remanufactured into new, higher-performance, flat glass.

Lyndsey West, Director of Operations at KpH, shared her view on the rapid, advancements of their Glass Forever partnership with Saint-Gobain, "Our teams are fully committed to Glass Forever and with each project, our knowledge and approach continues to expand. At KpH we approach challenges by asking, 'How can we tackle this?'. The word 'can't' doesn't cross our minds. The collaborative approach with Saint-Gobain Glass has helped find solutions that will lead to ongoing, continuous improvement."





FAÇADE PROJECTS



VIADUX, MANCHESTER

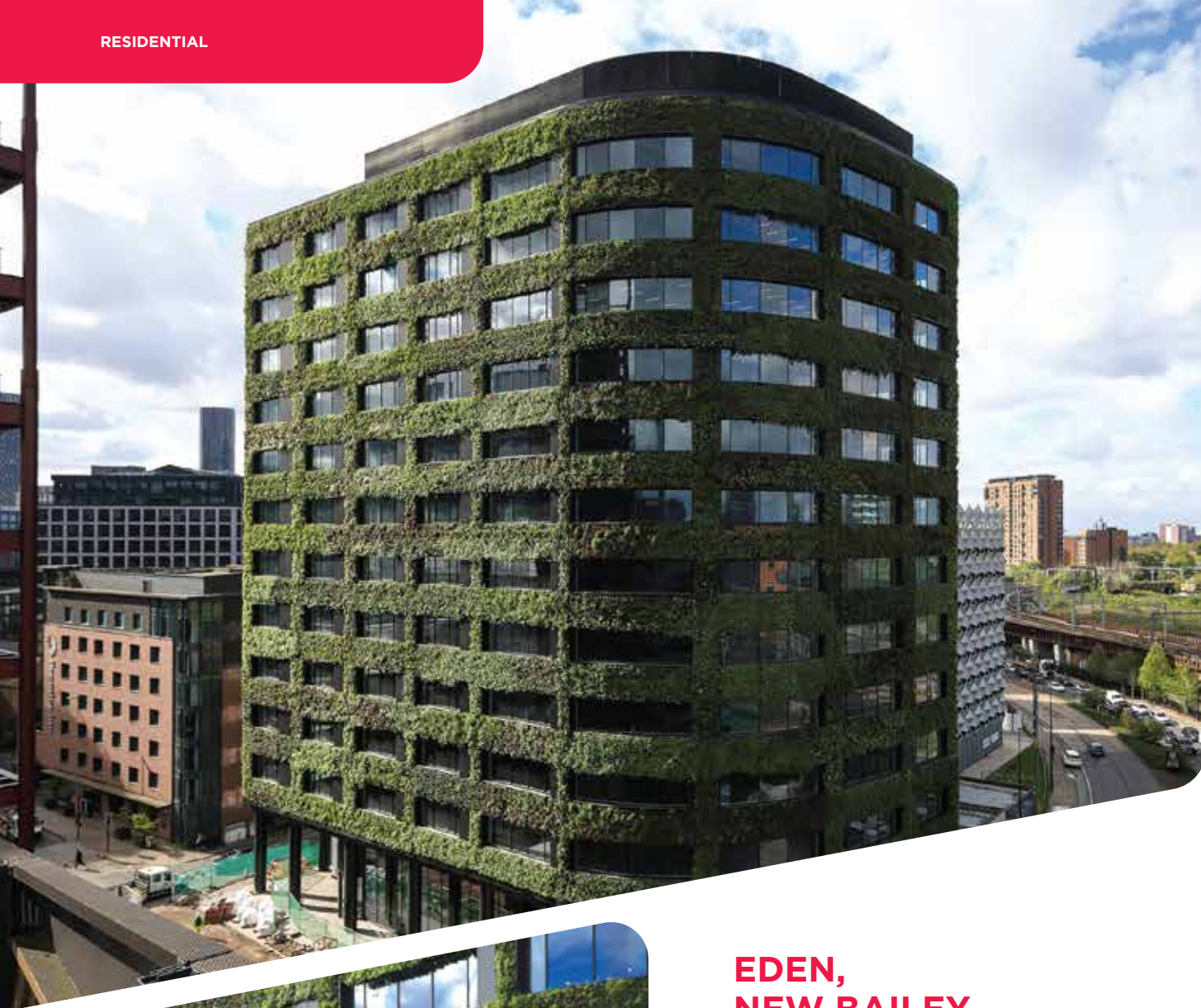
Saint-Gobain Glass COOL-LITE® SKN 183 (II)

Viadux is a brand new, 40-storey, residential tower, in the heart of Manchester, that houses luxury, 1 and 2 bedroom apartments.

The building's façade is glazed with Saint-Gobain Glass COOL-LITE® SKN 183 (II), to ensure high light levels and low overheating, whilst providing a neutral aesthetic.

See **Calumen.com** for product performances.

Project value: £130 million
 Client/Developer: Salboy
 Architect: SimpsonHaugh
 Main contractor: Domis Construction
 Façade: FK Group
 Glass processor: Press Glass



EDEN, NEW BAILEY

Saint-Gobain Glass STADIP® Silence COOL-LITE® XTREME 61/29

Eden is a pioneering, office development, set in Manchester's New Bailey district. From its inception, sustainability and net-zero carbon principles have been at the heart of its design; meeting the rigorous standards set by the UK Green Building Council for operational carbon neutrality.

The office block is on track for a BREEAM® Outstanding rating and a WiredScore of Platinum.

See **Calumen.com** for product performances.

Project value: £5 million
 Client/Developer: Muse, Legal & General and Homes England
 Architect: Make Architects
 Main contractor: Bowmer & Kirkland
 Façade: Quest Solutions
 Glass processor: Euroview



THE BLACK & WHITE BUILDING

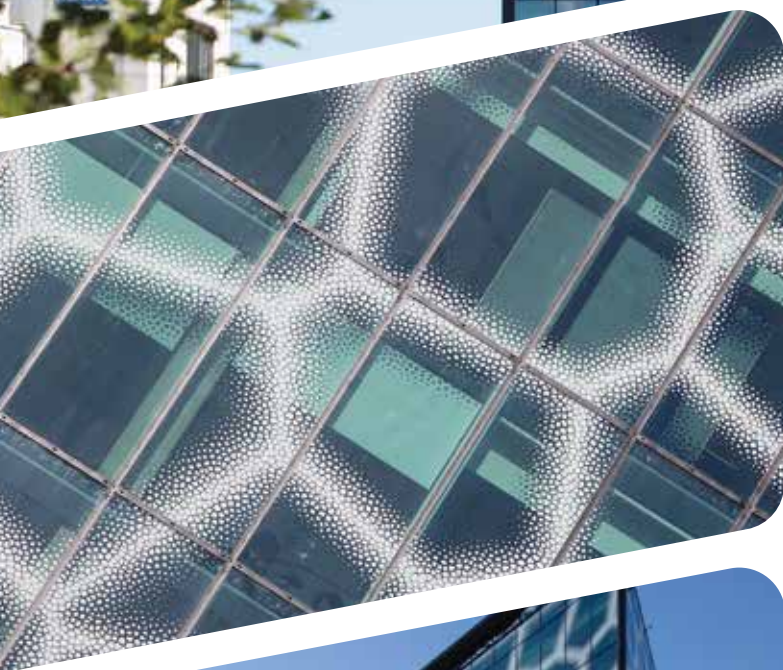
Saint-Gobain Glass COOL-LITE® SKN 183 (II)

A multi-award-winning building with a fully engineered, timber frame, enveloped with a glazed, curtain wall that provides ample natural light and reduced risk of solar heat gain, as it features Saint-Gobain Glass COOL-LITE® SKN 183 (II).

This low-carbon building has been optimised so that every component is designed to be as efficient as possible.

See **Calumen.com** for product performances.

Project value: £20 million
 Client/Developer: The Office Group
 Architect: Waugh Thistleton
 Main contractor: Parkaray
 Façade: Eckersley O'Callaghan, Pacegrade
 Glass processor: Euroview



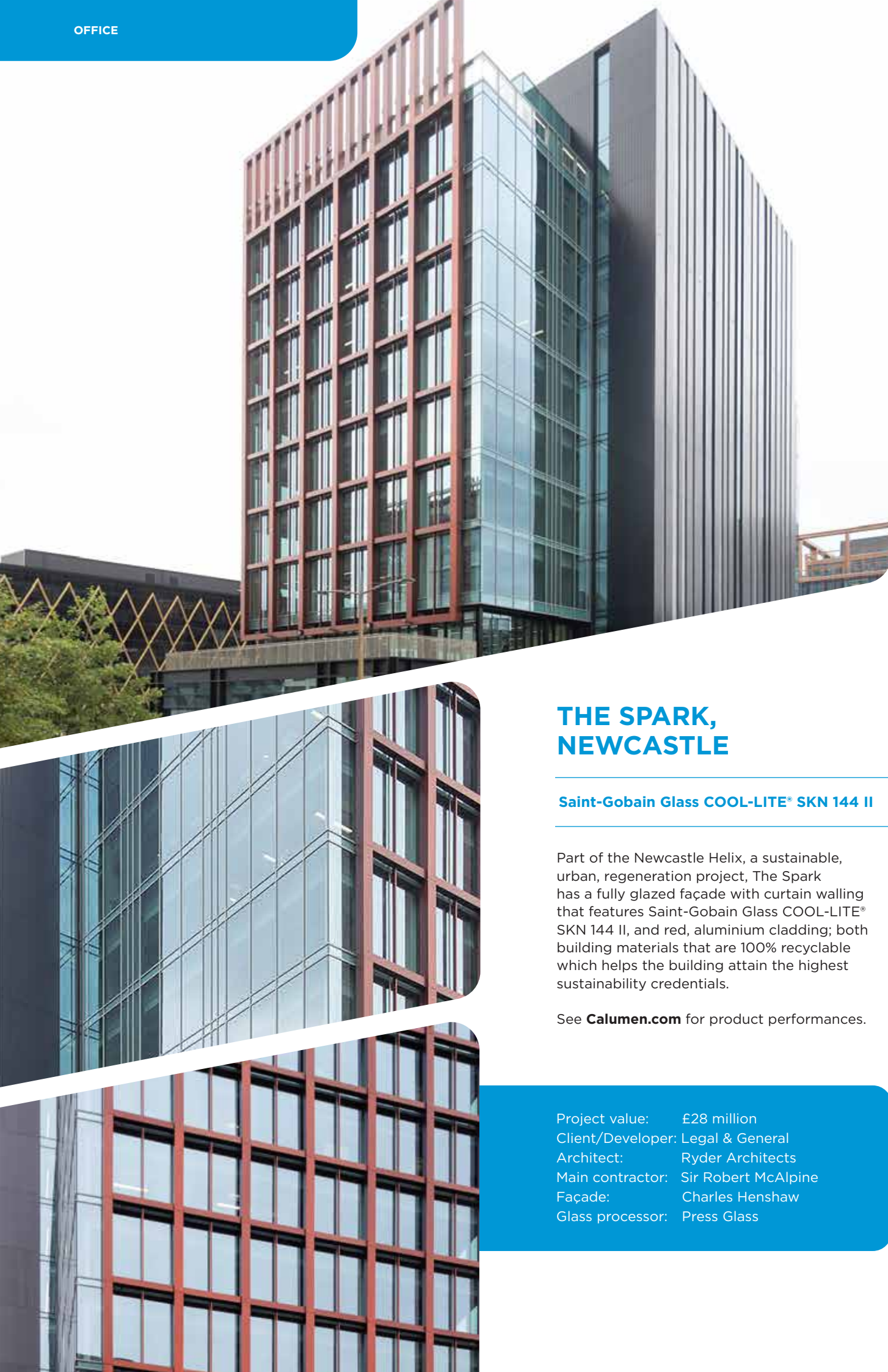
THE SPINE, LIVERPOOL

**Saint-Gobain Glass COOL-LITE®
XTREME 50/22 II**

The Spine features a unique glazed façade, made using Saint-Gobain Glass COOL-LITE® XTREME with a complex, digitally printed, design, on the outer pane. It provides some of the best views of the city centre and waterfront, whilst minimising overheating in sunny weather, and providing thermal insulation on colder days.

See **Calumen.com** for product performances.

Project value: £35 million
Client/Developer: Knowledge Quarter,
Liverpool
Architect: AHR
Main contractor: Morgan Sindall
Façade: FK Group
Glass processor: Tvitec



THE SPARK, NEWCASTLE

Saint-Gobain Glass COOL-LITE® SKN 144 II

Part of the Newcastle Helix, a sustainable, urban, regeneration project, The Spark has a fully glazed façade with curtain walling that features Saint-Gobain Glass COOL-LITE® SKN 144 II, and red, aluminium cladding; both building materials that are 100% recyclable which helps the building attain the highest sustainability credentials.

See **Calumen.com** for product performances.

Project value: £28 million
Client/Developer: Legal & General
Architect: Ryder Architects
Main contractor: Sir Robert McAlpine
Façade: Charles Henshaw
Glass processor: Press Glass



NEW VICTORIA, MANCHESTER

Saint-Gobain Glass COOL-LITE® SKN 183 II

New Victoria is a residential development that provides 520 new homes, in two distinctive towers.

Saint-Gobain Glass is used in the residential, buildings large, glazed façade. By minimising the reliance on heating and air conditioning systems, COOL-LITE® SKN 183 II helps to improve energy efficiency and reduce operational costs.

See **Calumen.com** for product performances.

Project value: £115 million
 Client/Developer: Muse with PIC, alongside Manchester City Council, Homes England & Network Rail.
 Architect: Sheppard Robson
 Main contractor: Vinci Construction
 Façade: FK Group
 Glass processor: Eckelt Glass



CARNEGIE SCHOOL OF SPORT, LEEDS

Saint-Gobain Glass COOL-LITE® SKN 176 II

The building provides a base for undergraduate, postgraduate and research programmes, as well as a training hub for elite athletes.

Saint-Gobain Glass COOL-LITE® SKN 176 II has been used in the glazed façade to maximise daylight within the internal spaces, functioning as a passive sustainable design feature.

See **Calumen.com** for product performances.

Project value: £45 million
 Client/Developer: Leeds Beckett University
 Architect: Sheppard Robson
 Main contractor: Galliford Try
 Façade: Glassolutions
 Glass processor: Dual Seal



ZURICH HQ, SWINDON

**Saint-Gobain Glass STADIP® COOL-LITE®
SKN 176**

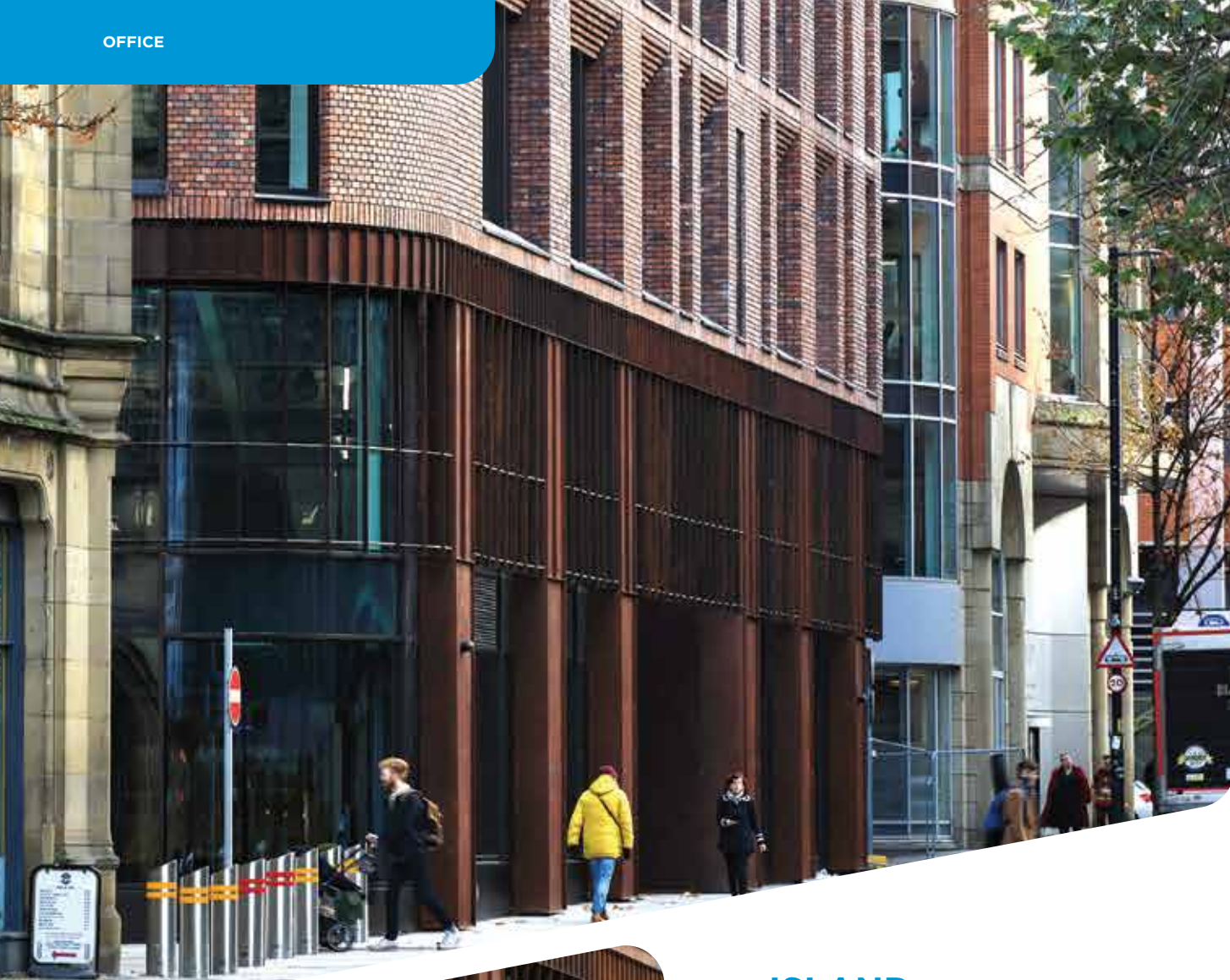
A new, state-of-the-art, office block that provides a flexible, working environment for employees. The building has been designed to rank amongst the top 10% of commercial buildings for sustainability in the UK.

The glazed, façade features Saint-Gobain Glass COOL-LITE® SKN 176, to achieve high, light transmission with reduced, demand on heating and cooling systems.

See **Calumen.com** for product performances.



Project value: £37 million
 Client/Developer: Zurich and Swindon
 Borough Council
 Architect: Alec French Architects
 Main contractor: Skanska
 Façade: APIC UK
 Glass processor: Dual Seal



ISLAND, MANCHESTER

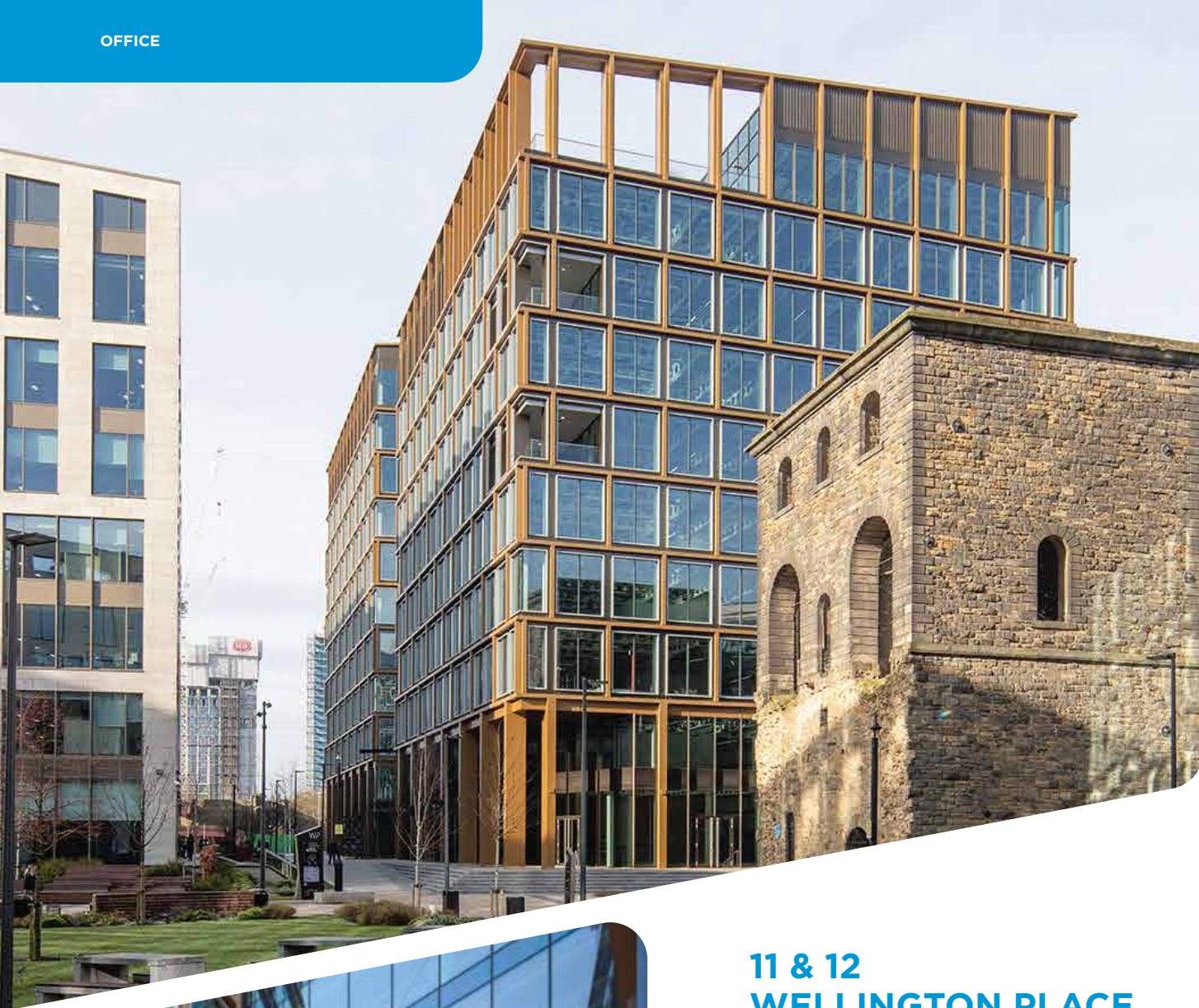
Saint-Gobain STADIP® COOL-LITE® SKN 176

Island is 10-storeys or 100,000 sqft of net-zero CO₂ workspace, in the heart of Manchester. It provides a home for forward-thinking, businesses who care about people, place and planet.

The building features Saint-Gobain Glass COOL-LITE® SKN 176 to ensure the building is flooded with natural light whilst being energy efficient due to the product's high selectivity.

See **Calumen.com** for product performances.

Project value: £66 million
 Client/Developer: HBD and the Greater Manchester Pension Fund
 Architect: Cartwright Pickard
 Main contractor: Bowmer + Kirkland
 Façade: Acorn Aluminium
 Glass processor: System 3



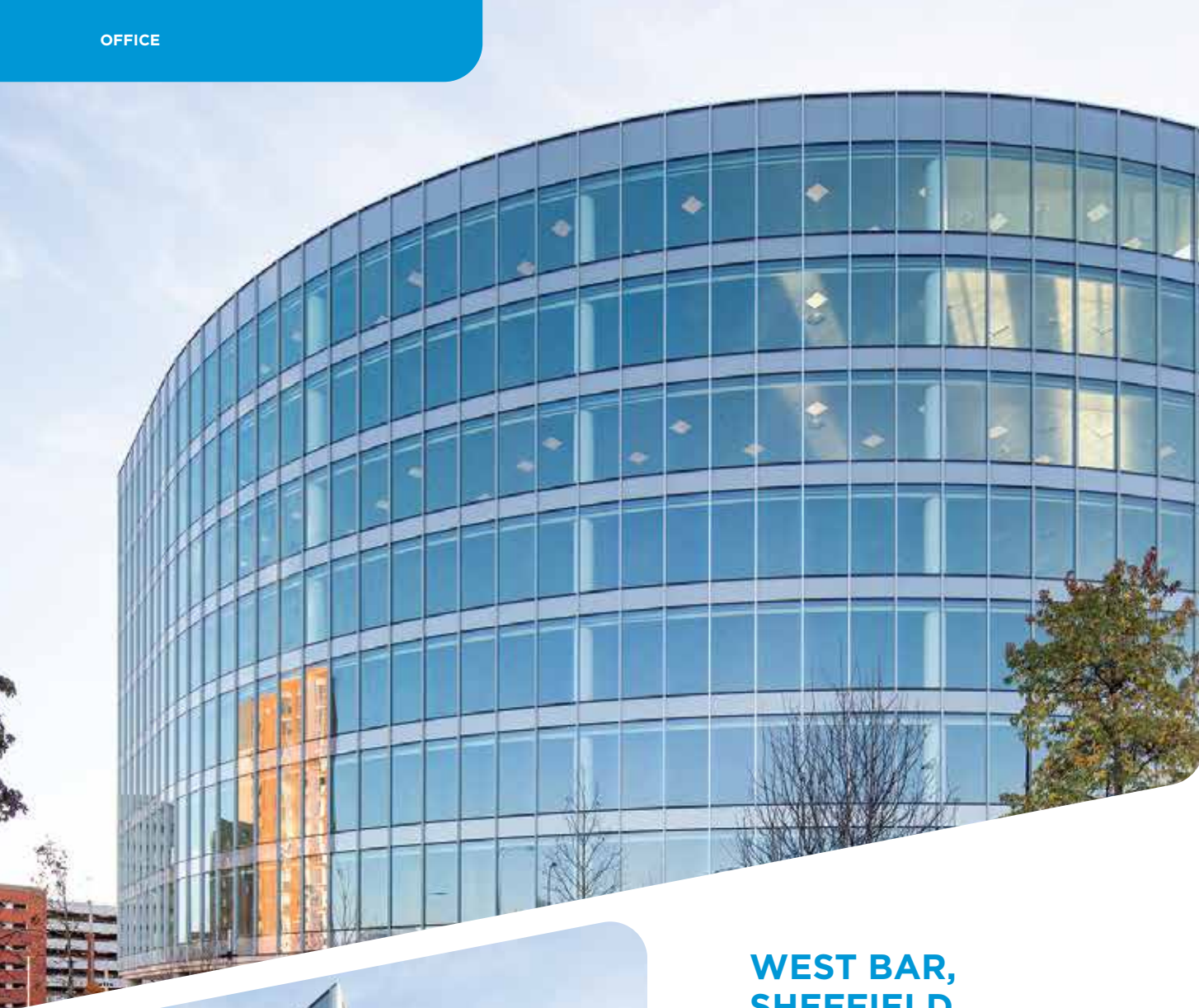
11 & 12 WELLINGTON PLACE, LEEDS

**Saint-Gobain Glass COOL-LITE® XTREME
70/33 II TGU**

Achieving a NABERS Designed Reviewed Target Rating of 5 Stars, EPC A, Fitwel Two Star and BREEAM® Outstanding, it is one of the UK's most sustainable office developments. The buildings provide 21,273m² of office space across two bronze-coloured structures connected by a glazed link at level 4 and above.

See **Calumen.com** for product performances.

Project value:	£55 million
Client/Developer:	MEPC
Architect:	tp bennett
Main contractor:	Wates
Façade:	Dane Architectural
Glass processor:	Press Glass



WEST BAR, SHEFFIELD

Saint-Gobain Glass COOL-LITE® SKN 183

West Bar is a regeneration scheme in the centre of Sheffield which provides one million sqft of commercial space alongside new apartments, a multi-storey car park and mixed-use spaces. The aim of West Bar is to provide a new, commercial home with high quality, sustainable, office space.

The fully glazed façade features Saint-Gobain Glass COOL-LITE® SKN 183 II to ensure the building delivers high levels of natural light whilst maintaining a comfortable interior, due to the product's high selectivity.

See **Calumen.com** for product performances.

Project value:	£300 million
Client/Developer:	Urbo and Legal & General
Architect:	5plus
Main contractor:	Bowmer + Kirkland
Façade:	MB Glass
Glass processor:	System 3



1 THE ISLAND QUARTER, NOTTINGHAM

Saint-Gobain Glass COOL-LITE® SKN 154 II

The renovated building has already become an iconic, canal-side destination. Set over three storeys, there is a drinks and dining venue on the lower floor with a more formal restaurant above.

Saint-Gobain Glass COOL-LITE® SKN 154 II has been used in the building to create a beautiful façade that delivers high levels of natural light, solar control and thermal efficiency.

See **Calumen.com** for product performances.



Project value: £9 million
 Client/Developer: The Conygar Investment Company
 Architect: Jestico + Whiles
 Main contractor: Sir Robert McAlpine
 Façade: Norman & Underwood
 Glass processor: System 3



11 STATION STREET, NOTTINGHAM

Saint-Gobain Glass COOL-LITE® SKN 165 II

11 Station Street is a Grade A, state-of-the-art, sustainable, office accommodation, located in the heart of Nottingham City Council's designated 'Southside Redevelopment Zone'.

The building achieves BREEAM® excellent through a range of sustainable measures, including the use of Saint-Gobain's COOL-LITE®, solar control glass that helps to improve the energy efficiency of the building.

See **Calumen.com** for product performances.



Project value: £12 million
 Client/Developer: Bildurn Properties
 Architect: Frank Ellis Architects
 Main contractor: Bowmer & Kirkland
 Façade: Acorn Aluminium
 Glass processor: Dual Seal



HEARTSPACE, SHEFFIELD

**Saint-Gobain Glass
COOL-LITE® XTREME**

The undulating, glazed roof is made using over 900 panels, covering an area of 2,500 sqm. The glazing features Saint-Gobain Glass COOL-LITE® XTREME, a higher-performance glass, that combines solar control with functionality, and elegance; vital to achieve such a challenging, roof glazing project.

See **Calumen.com** for product performances.

Project value: £30 million
 Client/Developer: University of Sheffield
 Architect: Bond Bryan
 Main contractor: Tilbury Douglas
 Façade: Waagner Brio
 Glass processor: Eckelt



MAJESTIC, LEEDS

Saint-Gobain Glass
COOL-LITE® SKN 176 II

The refurbishment of Majestic, Leeds, has paid homage to the history of the building by re-interpreting the space, and using materials that complement the existing building.

Saint-Gobain Glass COOL-LITE® has been used in the large, glazed façade to deliver high levels of natural light into the building helping ensure thermal efficiency.

See **Calumen.com** for product performances.

Project value: £2 million
Client/Developer: Rushbond
Architect: DLA Architecture
Main contractor: Sir Robert McAlpine
Façade: Hadrian Architectural
Glass processor: Carey Glass



Images © Elite Aluminium Systems

CULHAM SCIENCE PARK, OXFORDSHIRE

Saint-Gobain Glass COOL-LITE® SKN 175 II

Culham Science Park is a four-storey office building with a specialist R&D hall, focused on the development of the UK's world-recognised fusion technology.

The glass and aluminium façade delivers thermal performance, helping create an energy efficient building with high levels of natural light.

See **Calumen.com** for product performances.

Project value: £27 million
Client/Developer: UK Atomic Energy
Authority
Architect: AL_A Architects
Main contractor: Kier
Façade: Elite Aluminium Systems
Glass processor: Dual Seal



ONE CITY PARK, BRADFORD

**Saint-Gobain Glass COOL-LITE® XTREME
70/33 II**

One City Park demonstrates environmental leadership through sustainable features, such as thermally-efficient glazing, solar panels and lower-carbon heating.

The building's large, glazed façade features Saint-Gobain Glass COOL-LITE® XTREME 70/33 II, a highly selective, solar control coating that combines solar and thermal performance with a neutral aesthetic.

See **Calumen.com** for product performances.

Project value: £35 million
 Client/Developer: Muse and City of Bradford Metropolitan Dist. Council
 Architect: Sheppard Robson
 Main contractor: Caddick Construction
 Façade: Arup and CCL Façades
 Glass processor: Press Glass



4 ANGEL SQUARE, MANCHESTER

**Saint-Gobain Glass COOL-LITE® XTREME
70/33 II and SKN 183 II**

4 Angel Square is a net-zero, contemporary office building, located in the heart of NOMA, a mixed-use neighbourhood in central Manchester.

The fully glazed façade features a combination of Saint-Gobain COOL-LITE® XTREME and SKN, to help achieve sustainability targets.

See **Calumen.com** for product performances.

Project value:	£105 million
Client/Developer:	MEPC
Architect:	SimpsonHaugh
Main contractor:	Bowmer + Kirkland
Façade:	Topside
Glass processor:	Press Glass



SPANDREL GLAZING

Spandrel glass or non-vision glass is used on buildings to conceal essential components from view, such as floor levels, columns, ventilation systems, wiring and pipes. Used mainly for curtain walling and structural glazing, spandrel glass is a common component of building design. It is typically located below the vision glass on each floor of the building. Spandrel glass is often necessary to achieve the vision of the architect or designer to create a consistent, fully glazed, building façade. It can be complementary or contrasting in colour and texture, made using various technologies and finishes. Saint-Gobain Glass can provide support to architects, specifiers and glass processors, looking to match or contrast spandrel and vision glass within a façade.

Enamelled Glass

The main component of a spandrel is the opaque, coloured glass that is produced by enamelling one side of the glass. The glass is fired at very high temperatures to fuse the enamel and glass, giving the finished product a robust, uniform finish. Heating the glass to high temperatures tempers the glass, which will help avoid thermal stress breakages following installation.

Matching

The matching of spandrels can be a subjective process, as it can be influenced by changing viewing conditions and the opinion of the person observing the glass. Due to this variation, it is difficult to guarantee a perfect match between spandrel and vision glass.

PROJECT: West Bar, Sheffield

MUSEUM SPECIFICATIONS

Museums and galleries are designed to protect artefacts and works of art from damage, and so place emphasis on the performance of materials to limit the damaging effects of natural and artificial light. Saint-Gobain Glass works with partners throughout the specification, fabrication, and installation stages of glazing to help develop bespoke specifications, formed using our range of higher-performance, solar control glass.

PROJECT: Whitworth Gallery, Manchester





CURVED GLAZING

Curved glass is often used in architecture to give a building an organic look, using the curves to emulate nature and to provide a premium finish to a building. Curved glass can be used as part of a building façade or as interior features including staircases, balustrades and glazed atriums. The use of curved glass does not mean a loss of performance. Saint-Gobain's range of higher-performance glass can be transformed to create curved structures that can deliver on safety, security and performance, depending on the glazing configuration used.

PROJECT:
Island, Manchester

NON-FRAGILE ROOF GLAZING

The specification of roof glazing is particularly challenging due to the loads affecting the glass, including loading due to weather conditions and the need for maintenance access, along with the weight of the glass itself. Security and safety are also key concerns when specifying roof glazing. Should a pane break, it's vital that the glass remains intact and doesn't fall from height onto the ground below, causing injury to people inside the building. Saint-Gobain Glass has supported numerous building projects that feature complex roof glazing.

PROJECT:
Heartspace, Sheffield





OVERLENGTH GLAZING

The use of large panes of glass can help create awe-inspiring spaces. Producing and installing overlength glass panels from 6 to 18 metres in length is possible. Working in large scale using glass delivers on aesthetics, functionality and sustainability when considering the performance of glass, and the infinitely, recyclable nature of glass.

Saint-Gobain's overlength glass technology makes just about anything possible, including:

- Pre-cuts and edge processing with an arrissed, cut or polished edge
- Drilled holes in glass
- Curved glass
- Toughened glass and heat-soak tested glass
- Laminated safety glass
- Fall-proof glazing
- Glass with bespoke laminated colours or decorative foils
- Glass with ceramic or digital print
- Glass with full surface enamelling.

PROJECT:
RTC, Sheffield

INTERIOR SOLUTIONS

Saint-Gobain Glass designs and manufactures a range of patterned glass, for use in glazing and interior spaces.

PROJECT:
Lush, Liverpool





PRACTICAL AND LEGALLY COMPLIANT, TECHNICAL ADVICE

At Saint-Gobain Glass, our Technical Specification Team can provide comprehensive, specialist advice, tailored to an individual construction project. We collaborate with our clients throughout the entire lifecycle of flat glass, from manufacturing, distribution and installation, to end-of-life glass recovery and remanufacture.

You can benefit from our technical knowledge on flat glass topics, including industry regulations and precise mechanical calculations.

Access our suite of digital tools, including Calumen®, Saint-Gobain's digital, glazing simulator that calculates the light, energy and thermal performance of glazing.

Calumen has recently been updated to provide you with a greater range of acoustic data and the carbon footprint of Saint-Gobain Glass products. You can also download EPDs at [environdedec.com](https://www.environdedec.com), and contact the team for more information.

SERVICES PROVIDED BY THE TEAM

The correct choice of flat glass must consider several characteristics. Saint-Gobain Glass can provide mechanical calculations and thermal stress analysis, to verify the compliance of a glazing design; helping to ensure that glazing is fit-for-purpose and meets current standards, and regulations. Other factors such as durability, flatness and ease of cleaning should also be considered at the design stage.

Training and CPDs

Saint-Gobain Glass offers a range of training, CPDs and technical seminars. Visit www.saint-gobain-glass.co.uk or contact a member of the team for more information.

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LOWER-CARBON FLOAT GLASS

PLANICLEAR®

PLANICLEAR® is now a lower-carbon, clear float glass, achieving 7.22kg CO₂ e/m² for 4mm glass, based on the product's new, third-party verified EPD (published June 2026)¹.

The new declaration shows a carbon reduction of more than 34% compared with the previous PLANICLEAR® EPD.

This flat glass substrate is manufactured as standard by Saint-Gobain Glass UK & Ireland, using high volumes of recycled content (28.1%) which includes high volumes of post-consumer cullet (6.82% post-consumer cullet)².



LOWEST-CARBON CLEAR FLOAT GLASS IN THE SAINT-GOBAIN RANGE

ORAÉ® is the world's first EPD-verified, lower-carbon glass, manufactured by Saint-Gobain Glass.

It achieves a carbon footprint of 5.88kg of CO₂ eq./m² for a 4mm glass (GWP Categories A1-A3). It is manufactured in short term campaigns at several Saint-Gobain Glass manufacturing sites across the world using 64% recycled content and renewable electricity.

ORAÉ and PLANICLEAR® can be coated with Saint-Gobain's PLANITHERM® or COOL-LITE® coatings to provide higher performance glass, that can help improve the thermal efficiency of glazing.

**NEW
EPD**



- Significantly reduces the carbon footprint of glass façades.
- Manufactured with a 64% recycled glass content.
- Has an estimated carbon footprint of only 6.64kg CO₂ eq/m² (for a 4mm substrate).
- No compromise on technical or aesthetic performance.

PRODUCT PERFORMANCES

COOL-LITE® HIGHER-PERFORMANCE SOLAR CONTROL COATED GLASS

Sealed Unit Configuration (6-16-4)		Visible Light		Energy Factors		Solar Factor	U-Value	Normal Internal Emissivity (Single Outer Pane)	Selectivity
Outer Pane (Coating on Face 2)	Inner Pane	Total Light Transmission %	External Reflection %	Direct Transmission %	External Reflection %	g-Value	Argon (90%) W/m²K		
COOL-LITE® XTREME 70/33 II	PLANICLEAR®	70	11	31	36	0.33	1.0	0.01	2.12
COOL-LITE® XTREME 61/29 II	PLANICLEAR®	61	11	27	36	0.29	1.0	0.01	2.10
COOL-LITE® XTREME 51/23 II	PLANICLEAR®	51	13	21	37	0.23	1.0	0.01	2.22
COOL-LITE® SKN 183 II	PLANICLEAR®	75	12	38	35	0.40	1.0	0.01	1.88
COOL-LITE® SKN 176 II	PLANICLEAR®	70	13	35	37	0.37	1.0	0.01	1.89
COOL-LITE® SKN 175 II	PLANICLEAR®	70	14	33	37	0.35	1.0	0.01	2.00
COOL-LITE® SKN 165 II	PLANICLEAR®	61	16	32	37	0.34	1.0	0.01	1.79
COOL-LITE® SKN 155 II	PLANICLEAR®	50	15	24	34	0.27	1.0	0.01	1.85
COOL-LITE® SKN 144 II	PLANICLEAR®	42	20	20	31	0.23	1.1	0.03	1.83

All the above hold CE marked performance accreditation for the products in their annealed and tempered state.

Sealed Unit Configuration (8.8SS*-16-6)		Visible Light		Energy Factors		Solar Factor	U-Value	BS EN 356 Secure by Design	BS EN 12600 Impact Safety	Acoustic Rw (C;Ctr)
Outer Pane (Coating on Face 2)	Inner Pane	Total Light Transmission %	External Reflection %	Direct Transmission %	External Reflection %	g-Value	Argon (90%) W/m²K			
STADIP® SILENCE COOL-LITE® XTREME 70/33	PLANICLEAR®	69	11	29	31	0.31	1.0	P2A	1(B)1	42 (-2;-7)
STADIP® SILENCE COOL-LITE® SKN 176	PLANICLEAR®	69	13	33	31	0.35	1.0	P2A	1(B)1	42 (-2;-7)
STADIP® SILENCE COOL-LITE SKN 175	PLANICLEAR®	69	14	31	31	0.34	1.0	P2A	1(B)1	42 (-2;-7)
STADIP® SILENCE COOL-LITE® SKN 165	PLANICLEAR®	60	16	30	31	0.32	1.0	P2A	1(B)1	42 (-2;-7)

Please note that all the of the above configurations should be subject to a thermal safety check before specification.

* Higher performance, coated, flat glass, achieves an emissivity level of 3% or less. Saint-Gobain Glass' PLANITHERM® and COOL-LITE® products are higher performing than uncoated, flat glass substrates, based on emissivity level.

- **COOL-LITE® XTREME & COOL-LITE® SKN** are highly selective, solar control coated glass. Selectivity is the ratio between light transmission and solar heat gain. The higher the selectivity ratio, the better the glass performs when it comes to energy efficiency.
- **STADIP® & STADIP® SILENCE (SS)** are laminated glazing products that can provide safety, security and acoustic benefits, along with UV protection, dependent on glazing configuration.
- **PLANICLEAR®** All coatings feature on this substrate as standard, a lower-carbon float glass (comparing EPD published June 2026 with previous EPD).





STADIP® & STADIP® SILENCE LAMINATED FLAT GLASS

Configuration of Unit	1/1 Octave Band Centre Frequency Attenuation (dB)							
	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	Rw(C;Ctr)
6(16Argon)6	27	21	20	30	39	35	44	33(-1;-5)
8(16Argon)6	30	23	23	34	40	37	48	36(-2;-5)
10(16Argon)6	33	23	26	36	41	43	55	39(-2;-6)
6(16Argon)6.8SS (33.2)	30	23	25	36	46	49	56	39(-2;-6)
6(16Argon)8.8SS (44.2)	29	25	28	39	49	48	52	42(-2;-7)
6(16Argon)10.8SS (55.2)	31	25	29	40	50	46	53	42(-2;-6)
6(16Argon)10.8 (55.2)	32	27	29	38	44	44	54	41(-1;-5)
8(16Argon)10.8SS (55.2)	32	27	32	42	48	48	53	44(-2;-6)
8(16Argon)10.8 (55.2)	31	28	31	40	42	42	55	41(-1;-4)
10(16Argon)12.8SS (66.2)	29	30	33	43	45	47	57	44(-1;-4)
10(16Argon)12.8 (66.2)	24	26	32	39	38	43	56	40(-1;-4)
10(20Air)12.8SS (66.2)	-	29	36	43	44	46	59	45(-1;-5)
10(24Air)14.8SS (86.2)	27	33	37	44	45	44	54	45(-1;-3)
12.8A (66.2)(16Argon)8.8SS (44.2)	31	30	35	46	54	55	63	48(-2;-6)
10.8A (64.2)(24Air)14.8SS (86.2)	28	36	42	48	52	53	60	51(-1;-4)

*SS denotes the use of **STADIP® SILENCE** acoustic laminate interlayer. All acoustic performances are tested and certified in acoustic test reports and can be requested through Saint Gobain Glass.

- **STADIP® & STADIP® SILENCE SS** are laminated glazing products that can provide safety, security and acoustic benefits, along with UV protection, dependent on glazing configuration.

*SS denotes the use of **STADIP® SILENCE** acoustic laminate interlayer.

All acoustic performances are tested and certified in acoustic test reports, and can be requested from Saint Gobain Glass.

PLANITHERM® HIGHER-PERFORMANCE LOW-E COATED GLASS

Sealed Unit Configuration (6-16-6)		Visible Light		Energy Factors			Solar Factor	Shading Coefficient	U-Value
Outer Pane (Coating on Face 2)	Inner Pane	Total Light Transmission %	External Reflection %	Direct Transmission %	External Reflection %	Absorption %	g-Value	SC	Argon (90%) W/m²K
PLANITHERM® NEO	PLANICLEAR®	72	20	46	35	17	0.49	0.56	1.0
PLANITHERM® ONE T FG	PLANICLEAR®	66	25	41	38	20	0.44	0.51	1.0
PLANITHERM® ULTRA N II	PLANICLEAR®	79	12	55	26	18	0.59	0.67	1.1

Sealed Unit Configuration (6-16-6.8SS)		Visible Light		Energy Factors			Solar Factor	Shading Coefficient	U-Value
Outer Pane (Coating on Face 2)	Inner Pane	Total Light Transmission %	External Reflection %	Direct Transmission %	External Reflection %	Absorption %	g-Value	SC	Argon (90%) W/m²K
PLANITHERM® NEO	STADIP® SILENCE	72	19	43	35	17	0.48	0.56	1.0
PLANITHERM® ONE T FG	STADIP® SILENCE	65	25	39	38	22	0.44	0.50	1.0
PLANITHERM® ULTRA N II	STADIP® SILENCE	79	12	52	26	25	0.58	0.67	1.1

- **PLANITHERM®** is a range of higher performance, thermally insulating, low-emissivity (low-E) coated glass.

MAKING THE WORLD A BETTER HOME



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