



COMMERCIAL
PRODUCT
PERFORMANCE
GUIDE

Project: Eden, New Bailey
Product: Stadip Cool-Lite® Xtreme 61/29

SAINT-GOBAIN GLASS

PLANICLEAR®

LOWER-CARBON FLAT GLASS AS
STANDARD

Saint-Gobain Glass UK & Ireland has taken a significant step forward in lower-carbon flat glass production. At its Eggborough plant, PLANICLEAR® is now a lower-carbon float glass, achieving 7.22kg CO₂e/m² for 4mm glass (GWP Categories A1-A3) based on the product's new, third-party verified Environmental Product Declaration (EPD). The new declaration, published June 2026, 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.

EPDs: environdec.com



NEW
EPD

ORAE®

ORAE® is the lowest carbon product in the Saint-Gobain Glass range. 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.

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/m ² K		
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/m ² K			
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).

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	Argon (90%) W/m ² K
PLANITHERM® NEO	PLANICLEAR®	72	20	46	35	17	0.49	0.56
PLANITHERM® ONE T FG	PLANICLEAR®	66	25	41	38	20	0.44	0.51
PLANITHERM® ULTRA N II	PLANICLEAR®	79	12	55	26	18	0.59	0.67

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	Argon (90%) W/m ² K
PLANITHERM® NEO	STADIP® SILENCE	72	19	43	35	17	0.48	0.56
PLANITHERM® ONE T FG	STADIP® SILENCE	65	25	39	38	22	0.44	0.50
PLANITHERM® ULTRA N II	STADIP® SILENCE	79	12	52	26	25	0.58	0.67

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

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.

Calumen®

Calumen® is a digital glazing configurator designed for all building professionals, whatever their level of expertise in glass products:

- Architects
- Designers
- Engineering offices
- Consultants
- Façade makers
- Window manufacturers
- Glass processors
- General contractors.

Uses up-to-date, verified data to present product performances based on a glazing configuration.

Enter your required performances and Calumen can recommend a solution.

Includes energy, solar and acoustic performances, along with EPD information.



Calumen®
Saint-Gobain Glass'
Glazing Configurator.



A CIRCULAR
ECONOMY APPROACH
TO FLAT GLASS
RECYCLING

We remanufacture end-of-life glazing into new, higher-performance flat glass.

Glass Forever is a comprehensive programme by Saint-Gobain Glass UK & Ireland, that provides solutions to recover cullet from all waste streams including pre-consumer cullet from off-cuts made during the processing of flat glass into glazing, and post-consumer cullet found in end-of-life buildings and refurbishment projects.

Companies across glazing, construction and deconstruction are partnering with Saint-Gobain to use the Glass Forever programme as part of their waste management processes, as one tonne of cullet can potentially save 700kg of carbon being released into the atmosphere and 1.2 tonnes of virgin raw materials being used in the production of flat glass.

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



GLASS
FOREVER

GLOSSARY OF TERMS

LIGHT TRANSMITTANCE (TL)

The proportion of the visible spectrum that is transmitted through the glass.

U-VALUE

This is the measure of the rate of heat loss from a building component. It is expressed as Watts per square metre, per Kelvin, W/m²K.

SOLAR FACTOR (g)

The percentage of total solar radiant heat energy transmitted through glazing (the sum of energy transmitted directly and energy absorbed and re-emitted to the interior).

LIGHT REFLECTANCE (LRE)

The proportion of the visible spectrum that is reflected by the glass.

WEIGHTED NOISE REDUCTION (RW)

A single figure rating for the sound insulation of building elements. Includes a weighting for the human ear.

CULLET

End-of-life flat glass that can be recycled into new higher-performance flat glass, using Saint-Gobain's Glass Forever programme.

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