SAINT-GOBAIN

PLANITHERM® NEO

Higher-performance[1] low-emissivity glass

SAINT-GOBAIN GLASS

PLANITHERM® NEO

PLANITHERM® NEO has been optimised for both double-glazed and triple-glazed applications. The optimum centre-pane U-value of 1.0W/m².K[2] is designed to help manufacturers achieve low U-value windows and doors to meet the needs of homeowners and building designers for highly thermally insulating products.

With a solar gain (g-value) of 54%[3], PLANITHERM® NEO can provide performance benefits for low U-value products under the British Fenestration Rating Council (BFRC) Window Energy Rating (WER) and Door Energy Rating (DER) schemes.

Calumen®
Saint-Gobain Glass' Glazing Configurator.

BENEFITS

Thermal insulation

- Delivers an optimum centre-pane U-value of 1.0W/m².K in a double-glazed unit[2] and 0.5W/m².K in a triple-glazed unit[4].
- Designed for both double-glazed units (DGUs) and triple-glazed units (TGUs).

Solar gain

- Optimised solar gain (g-value) of 54%[3], can provide performance benefits under the British Fenestration Rating Council (BFRC) Window Energy Rating (WER) and Door Energy Rating (DER) schemes.

Light transmission & reflection

- The new surface coating design delivers a lower reflection of 20%[5] and a higher light transmission of 73%[6], when compared with PLANITHERM® ONE T.

Toughened glass

- PLANITHERM® NEO is a "single-stock" coating and therefore can be used in either annealed or toughened form. It can be toughened to meet the safety requirements of BS EN 12150.

Laminated glass

- Can be incorporated into the STADIP® laminated glass range. Please contact us for lead times and availability.

ENVIRONMENTAL CREDENTIALS

- Made using PLANICLEAR®, lower-carbon flat glass as standard. PLANICLEAR® is now a lower-carbon, clear float glass, based on the product's new, third-party verified EPD[7] (published June 2026).
- The new declaration shows a carbon reduction of more than 34% compared with the previous PLANICLEAR® EPD. PLANICLEAR® now achieves 7.22kg CO_2e/m² for 4mm glass (Global Warming Potential categories A1-A3). This flat glass substrate is manufactured as standard by Saint-Gobain Glass UK & Ireland.
- Manufactured in the UK, which can help support supply chain security and product availability.
- Using 1 tonne of cullet in the manufacture of new float glass prevents the use of 1.2 tonnes of virgin raw materials and 700kg of CO_2 emissions (scopes 1, 2 & 3)[8].

PERFORMANCE

	Double-Glazed Unit (DGU)		Triple-Glazed Unit (TGU)		Triple-Glazed Unit (TGU)	
EXTERNAL PANE	PLANICLEAR®	DIAMANT®	PLANICLEAR®	DIAMANT®	PLANICLEAR®	DIAMANT®
INTERNAL PANE	PLANITHERM® NEO					
COMPOSITION IN MM	4 (16) 4		4 (12) 4 (12) 4		4 (16) 4 (16) 4	
LOW-EMISSIVITY COATING POSITION	Face 3[9]		Faces 3 & 5		Faces 3 & 5	
LIGHT TRANSMITTANCE T_L** (%)	73	73	59	60	59	60
LIGHT REFLECTANCE, EXTERNAL R_{LE}** (%)	20	20	27	27	27	27
SOLAR FACTOR G-VALUE** (Argon 90%)	0.54	0.55	0.42	0.43	0.42	0.43
U-VALUE IN W/m².K* (Argon 90%)	1.0	1.0	0.7	0.7	0.5	0.5

* according to EN673. ** according to EN410

References

1. 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.
2. Refer to the double-glazed unit configuration of 4mm PLANICLEAR® / 16mm cavity, 90% argon / 4mm PLANITHERM® NEO (face 3) in the performance table, with a centre-pane U-value of 1.0 W/m².K
3. Refer to the double-glazed unit configuration of 4mm PLANICLEAR® / 16mm cavity, 90% argon / 4mm PLANITHERM® NEO (face 3) in the performance table, with a g-value of 0.54
4. Refer to the triple-glazed unit configuration of 4mm PLANICLEAR® / 16mm cavity, 90% argon / 4mm PLANITHERM® NEO (face 3) / 16mm cavity, 90% argon / 4mm PLANITHERM® NEO (face 5) in the performance table, with a centre-pane U-value of 0.5W/m².K
5. A double-glazed unit configuration of 4mm PLANICLEAR® / 16mm cavity, 90% argon / 4mm PLANITHERM® NEO (face 3) has an outdoor reflectance (RLe) and indoor reflectance (RLi) of 20%, compared with a double-glazed unit configuration of 4mm PLANICLEAR® / 16mm cavity, 90% argon / 4mm PLANITHERM® ONE T FG (face 3) with an outdoor reflectance (RLe) and indoor reflectance (RLi) of 25%
6. A double-glazed unit configuration of 4mm PLANICLEAR® / 16mm cavity, 90% argon / 4mm PLANITHERM® NEO (face 3) has a light transmission (TL) of 73%, compared with a double-glazed unit configuration of 4mm PLANICLEAR® / 16mm cavity, 90% argon / 4mm PLANITHERM® ONE T FG (face 3) with a light transmission of 67%
7. EPD – environdec.com
8 The benefit of cullet use is based on a calculation which uses Life Cycle Analysis level data representing all Saint-Gobain Glass European float lines producing architectural glass.
9. In a standard double-glazed unit (DGU) there are four potential surfaces to which coatings can be applied: surface 1 faces outdoors, surface 2 and surface 3 face each other inside the DGU, separated by a peripheral spacer which creates an insulating air space, and surface 4 faces directly indoors.

PLANITHERM® NEO must always be processed into an insulating glass unit (IGU) with the coating positioned towards the inside of the cavity. It is not suitable for single glazing applications. The Saint-Gobain recommendation is to always toughen the centre-pane of a triple-glazed unit when using silica glass. For full processing and handling instructions please refer to the document "Guidance for use - "single-stock" low-E coated glass". Available from Saint-Gobain Glass on request.

Performance data calculated using Calumen.com and is correct at the time of publishing (22.10.2026) but is subject to change at any time. This document is regularly updated; information in this document is subject to change. Please check with your local sales and specification team. All trademarks are registered trademarks of Saint-Gobain Glass or affiliates, part of Saint-Gobain group. Images are for illustrative purposes only.

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