

E-CLEAR[®] A

Durable low-E glass



DURABLE LOW-E GLASS

Designed to complement the existing range of thermally insulating coatings from Saint-Gobain Glass, E-CLEAR® A is an entry-level product with a number of specific advantages over traditional pyrolytic (hard) coatings.

HIGHLIGHTS



EASY TO PROCESS GLASS

Thanks to advanced coating technology, E-CLEAR® A provides glass processors with an easier to process, more durable low-emissivity (Low-E) solution that does not require edge- deletion when used with approved sealants*. E-CLEAR® A is a single stock product for both annealed and tempered applications with an extended storage shelf life and improved toughening cycle time.



ENERGY EFFICIENCY

E-CLEAR® A has been designed to optimise thermal performance with solar gain, enabling it to achieve a minimum 'B' Window Energy Rating with PLANICLEAR® standard clear float counter-pane and warm-edge spacer. 'A' ratings can also be reached with further window and unit adaptations.



DAYLIGHT COMFORT

E-CLEAR® A can lower the demand for artificial lighting thanks to its very high transparency and optical clarity.



AESTHETICS

With a slightly neutral/blue appearance E-CLEAR® A is aesthetically pleasing for window applications and offers installers and fabricators an improved solution for Window Energy Ratings without the haze side-effects of traditional pyrolytic (hard) coatings.



WINTER COMFORT

Thanks to a low centre-pane U-value of 1.3 W/m².K, E-CLEAR® A reduces heat loss through windows, making homes more comfortable and reducing cold spots around areas of glazing.

POSSIBLE COMBINATIONS

E-CLEAR® A can be combined with other specialist glass products available from the Saint-Gobain Glass range, to achieve a multitude of high performance, multi-functional glazing solutions.

PRODUCT RANGE

Thickness	Standard size
4mm	3210 x 2550mm

Please contact us for lead times and availability of other sizes, thicknesses and laminated options.

*A list of approved sealants is available on request from Saint-Gobain Glass.

DESCRIPTION

E-CLEAR® A is a durable low emissivity (low-E) glass manufactured on a magnetron coater. It is a “single-stock” product for annealed or toughened use that does not require edge-deletion (when used with approved sealants*).

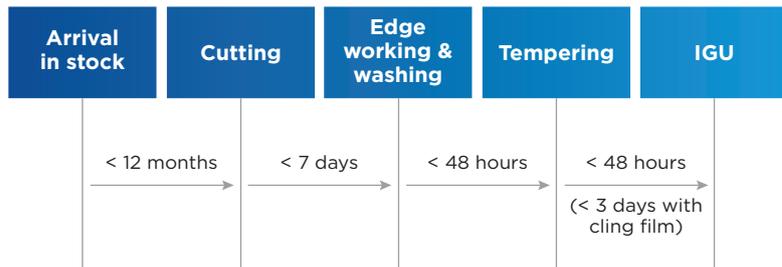
The transparent metallic coating combines good levels of thermal performance with pleasing aesthetics.

INSTRUCTIONS

- E-CLEAR® A should always be assembled into an insulating glass unit (IGU), with the coating facing the cavity of the unit.
- Edge-deletion prior to assembly into an IGU is not required when used with approved sealants*. If any other sealant is used, edge-deletion is required.
- Always process sheets with the coated side facing upwards.
- Refer to the timeline for stand down time between processes.
- Tempering: use clear float program as a reference adding 20 seconds heating time, with a temperature (bottom/top) around 700°C. Do not use SO₂ in the furnace.
- Washing: water conductivity ≤ 20µS, pH 6-8, 30-40°C with soft brushes.
- Evaporating cutting oil is recommended, such as ACECUT (5250,5503).
- Always wear gloves suitable for handling coated glass.
- Storage: Use within one year from delivery. Store in a dry, well ventilated store to prevent any condensation and running water on the surface. Never store outside or in the open air, and keep it protected from wide changes in temperature and humidity levels from opening doors.
- E-CLEAR® A is not suitable for single-glazing applications.

PROCESSING TIMELINE

This is an overview of the most important timings to consider when processing E-CLEAR® A coated glass. The information is not exhaustive so please refer to the detailed “Guidance for Use: Part 4 – Durable low-E glass” document which is available on request from Saint-Gobain Glass.



TECHNICAL SPECIFICATIONS

	Double Glazed Unit (DGU)	
Internal Pane	E-CLEAR® A	
External Pane	PLANICLEAR®	DIAMANT®
Composition in mm	4(16)4	
Low-Emissivity Coating Position	Face 3	
Light Transmittance, T _L	73%	74%
Light Reflectance, External, R _{LE}	12%	12%
Light Reflectance, Internal, R _{LI}	11%	11%
Solar Factor, g Value (Argon (90%))	0.70	0.72
U-value in W/m ² .K** (Argon (90%))	1.3	

E-CLEAR A meets the durability requirements of class C of European Standard EN 1096 and is CE and UKCA marked. Light and solar performance according to EN 410.
 **Centre-pane U-values have been rounded in accordance with EN 673.
 Performance data calculated using Calumen III 1.27 and is correct at the time of publishing (14.03.2024) but is subject to change at any time.



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