

THERMAL INSULATING GLASS

ClimaGuard® A+

Next generation Low E performance

- **Low 1.2 U value**
- **71% Solar Heat Gain**
- **Exceptionally neutral appearance**
- **Optimised window energy rating performance**
- **Easily achieves A rated windows**
- **Exceeds building regulation requirements**

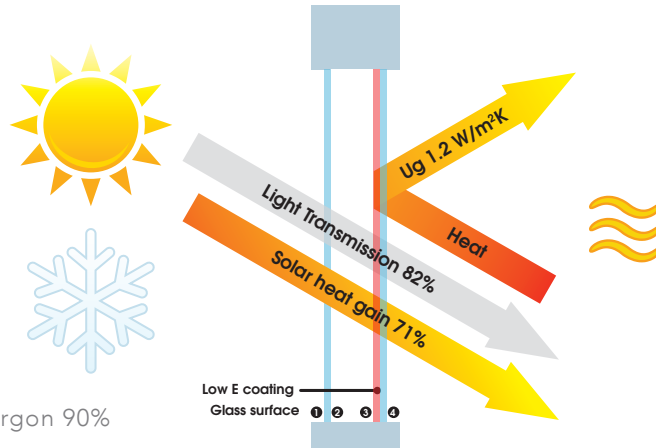
GUARDIAN offers ClimaGuard® A+, a thermal insulating glass meeting the highest performance and quality standards that is designed to exceed your expectations on transparency and solar heat gain. Using ClimaGuard® A+ will not only have a positive effect on your heating costs but also make an active contribution to environmental protection and sustainability.

ClimaGuard® A+ is specifically designed to satisfy all national and local building regulations through out the UK and Ireland, achieving the highest window energy rating performance and U value compliance.



PRODUCT DESCRIPTION

By combining excellent thermal insulation with a high level of solar heat gain, ClimaGuard® A+ ensures reduced heating costs during winter months. Through the efficient utilisation of free solar energy, ClimaGuard® A+ allows solar heat gains to pass through the glazing which is then retained within the building by the low emissivity coated glass.



Double glazing 4-16-4, argon 90%

TECHNICAL DATA / PERFORMANCE TABLE

Double Glazed						
Outer Pane	Cavity	Inner Pane	Light Transmission	Reflectance (Outside)	Solar Heat Gain (g-value)	Centre pane U-value
	(mm)	Coated Glass Surface (#)	[%]	[%]	[%]	W/(m²K)
Clear Float	16mm Argon	ClimaGuard A+ (#3)	82	13	71	1.2
Low Iron	16mm Argon	ClimaGuard A+ (#3)	82	13	73	1.2

Triple Glazed								
Outer Pane	Cavity	Middle Pane	Cavity	Inner Pane	Light Transmission	Reflectance (Outside)	Solar Heat Gain (g-value)	Centre pane U-value
	(mm)	Coated Glass Surface (#)	(mm)	Coated Glass Surface (#)	(%)	(%)	(%)	W/(m²K)
Clear Float	16mm Argon	ClimaGuard A+ (#3)	16mm Argon	ClimaGuard A+ (#5)	74	17	61	0.6
Clear Float	12mm Krypton	ClimaGuard A+ (#3)	12mm Krypton	ClimaGuard A+ (#5)	74	17	61	0.5

*Gas filling rate 90%

All performance data are nominal values and are subject to production tolerances

PROCESSING

ClimaGuard® A+ is a single product, soft coat Low E glass, which uses magnetron sputtered technology to produce a durable, processor friendly coated glass. The coating must be removed from the perimeter, via edge deletion, before being manufactured into hermetically sealed, insulated glass units. As a single product ClimaGuard® A+ can be used either in its annealed form or it can be heat treated for use in safety glazing, which is a key requirement of Building Regulations.

STANDARDS

EN410 – Light & heat, EN673 – U Value

