

Thermally insulating glass



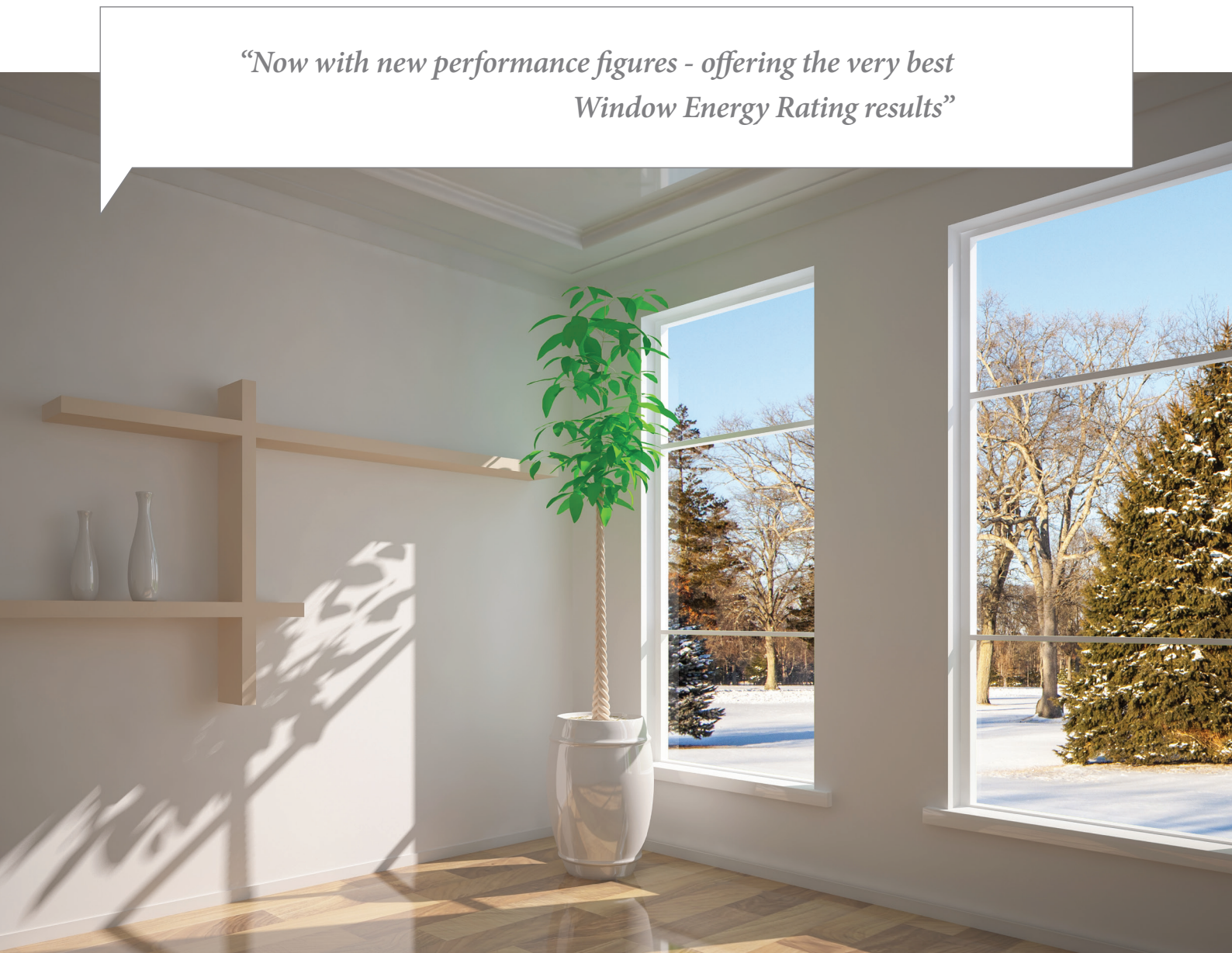
# ClimaGuard® A+

Next generation Low E performance

Guardian offers a new improved 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. The new and improved Low E glass maintains the same thermal performance with an increased level of solar heat gain. Using ClimaGuard A+ should not only have a positive effect on your heating costs, it may also help improve levels of comfort in your home.

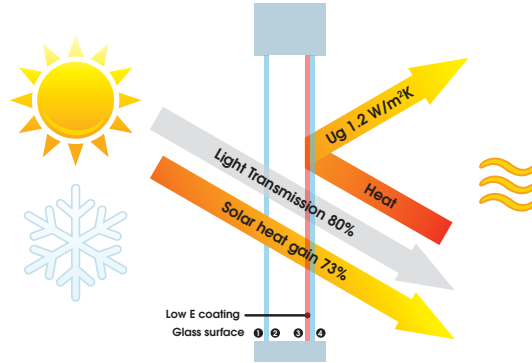
ClimaGuard® A+ is specifically designed to satisfy all national and local building regulations through out the UK and Ireland, achieving the highest window energy rating performance and U value compliance.

*“Now with new performance figures - offering the very best  
Window Energy Rating results”*



## Product Description

By combining excellent thermal insulation with a high level of solar heat gain, ClimaGuard® A+ may help to reduce heating costs during winter months. Through the efficient utilisation of free solar energy, ClimaGuard® A+ allows solar heat 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 (mm)*	Inner Pane Coated Glass Surface (#)	Light Transmission	Reflectance (Outside)	Solar Heat Gain (g-value)	Centre pane U-value
Extra Clear	16mm Argon	ClimaGuard A+ (#3)	80%	13%	73%	1.2 W/(m²K)
Low Iron	16mm Argon	ClimaGuard A+ (#3)	80%	13%	75%	1.2 W/(m²K)

Triple Glazed								
Outer Pane	Cavity (mm)*	Middle Pane Coated Glass Surface (#)	Cavity (mm)*	Inner Pane Coated Glass Surface (#)	Light Transmission	Reflectance (Outside)	Solar Heat Gain (g-value)	Centre pane U-value
Extra Clear	16mm Argon	ClimaGuard A+ (#3)	16mm Argon	ClimaGuard A+ (#5)	70%	17%	63%	0.6 W/(m²K)
Extra Clear	12mm Krypton	ClimaGuard A+ (#3)	12mm Krypton	ClimaGuard A+ (#5)	70%	17%	63%	0.5 W/(m²K)

\*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



Disclaimer: The information contained in this publication is a general description of the product ClimaGuard® A+ and GUARDIAN hereby disclaims all liability arising from any inaccuracy in or omissions from this publication and all the consequences of relying on it. It is the responsibility of the users of this information to ensure that the intended application of ClimaGuard® A+ is appropriate and complies with all relevant laws, regulations, standards, codes of practices and other requirements. It is recommended that fabricators of ClimaGuard® A+ consult the Processing Guidelines provided by GUARDIAN for specific instructions on how to handle, store, treat, process, use and install ClimaGuard® products successfully. The Processing Guidelines are provided with the first delivery of ClimaGuard® A+ or can be obtained directly from GUARDIAN.