

Thermal Insulating Glass ClimaGuard®

Advanced Thermal Performance

The ClimaGuard Range comprises four products for use in residential, commercial and architectural applications where thermal insulation is essential in complying with Building Regulations and Standards.

The increasing cost of energy, sustainability of natural resources and the reduction of harmful CO₂ emissions are at the forefront of political and environmental concerns today. The construction industry is constantly being challenged to significantly reduce the future energy requirement in buildings, the greatest energy loss being that of heat through the external envelope of a building.

In comparison with other construction materials, state-of-the-art insulating glass units provide excellent thermal insulation together with high transparency. This architectural benefit provides almost unlimited creative options in building design.

- ClimaGuard DS
- ClimaGuard A+
- ClimaGuard A 1.1
- ClimaGuard A 1.0



Product Descriptions

ClimaGuard DS is designed for the residential market. It has an attractive hint of blue in the coating and provides a U-value of up to 1.3 W/m²K in an argon filled double glazing unit. ClimaGuard DS also offers advanced durability through processing making it an ideal alternative to hard coat Low E options.

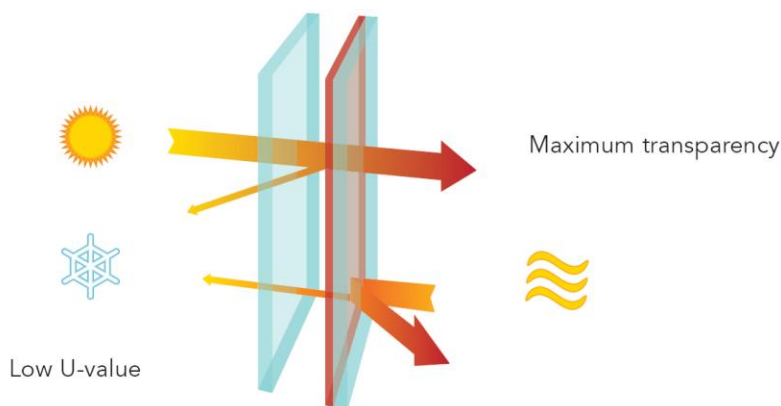
ClimaGuard A+ offers the very best Window Energy Rating performance, the combination of a high g value (Solar Gain) and a low U value of 1.2 W/m²K produces Window Energy Rating results in excess of A+ 10 in double glazing and A+ 25 in triple glazing. ClimaGuard A+ is ideal for any application where passive solar heat gain is desired in combination with good thermal insulation.

ClimaGuard A 1.1 is specifically designed for use in architectural buildings. It has a very neutral appearance and can achieve U-values of 1.1 W/m²K in an argon filled double glazing unit.

ClimaGuard A 1.0 is also specifically designed for use in architectural buildings. It has a very neutral appearance and can achieve U-values of 1.0 W/m²K in an argon filled double glazing unit.

All ClimaGuard Low E glass options are single products and can be used either annealed or heat treated.

Performance



Characteristics

Insulating glass configuration	Coated surface	Gas filling (90%)	Light Transmission [%]	Light Reflection [%]	Colour Rendering Index [Ra]	Solar Factor (g) EN 410 [%]	U-value EN 673 (15K) W/m ² K
ClimaGuard DS							
4 - 16 - 4	3	argon	70	12	96	69	1.3
ClimaGuard A+							
4 - 16 - 4	3	argon	80	13	99	73/76*	1.2
ClimaGuard A 1.1							
4 - 16 - 4	3	argon	79	13	98	65	1.1
ClimaGuard A 1.0							
4 - 16 - 4	3	argon	72	21	97	54	1.0

All performance data are nominal values and are subject to production tolerances. The data were determined according to EN 410.

* Clear outer pane / Low Iron outer pane

Disclaimer: The products in this publication are sold subject to Guardian's standard terms and conditions of sale and any applicable written warranties. It is the responsibility of the purchaser to confirm that the products are suitable for their intended application. Please contact your local Guardian representative to obtain any applicable handling and fabrication guides and for the most current information about the product and its use.