

THERMAL INSULATING GLASS

ClimaGuard® Solar

Comfort and energy saving all year round

- **Optimised solar protection**
- **Exceptional thermal insulation**
- **Year round climate comfort**
- **Neutral appearance**

Reducing energy consumption in modern buildings is essential. In addition to lowering heating costs in the winter, we also need to consider reduction of the amount of energy used for air-conditioning in the summer.

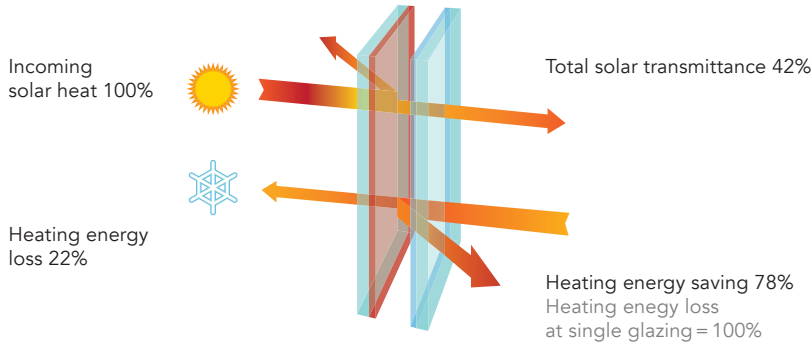
In comparison with other construction materials, insulating glass units with ClimaGuard® Solar coated glass provide excellent thermal insulation and solar control combined with high transparency. This allows designers to use larger window surfaces, resulting in more natural light inside the building.



PRODUCT DESCRIPTION

GUARDIAN ClimaGuard® Solar combines a high level of thermal insulation with an effective solar protection. Its reduced solar factor minimises air conditioning costs and contributes to an optimal indoor environment.

FUNCTIONS AND BENEFITS



ClimaGuard® Solar is the preferred choice where requirements such as thermal and solar insulation, energy management, transparency and comfort are desirable.

GUARDIAN ClimaGuard® Solar is intelligent energy management and environmental protection: a solar factor (g-value) of 42% ensures efficient protection from solar energy, corresponding in a reduction in air-conditioning costs, and contributing to a feeling of comfort and well-being.

A low U-value (1.1 W/m²K at standard IGU) reduces the heating costs during cold weather, providing a direct contribution to climate protection by a reduction in CO₂ emissions.

GUARDIAN ClimaGuard® Solar differentiates between various wave-lengths of solar radiation: most of the infra-red radiation, which would otherwise heat the inside of the building will be reflected, however it can still allow daylight to pass through almost unrestricted.

TECHNICAL DATA / PERFORMANCE TABLE

Insulating glass configurations	Coating on surface	Gas filling	Light Transmission [%]	Light Reflection [%]	Colour Rendering Index Ra	Solar Factor (g) EN 410 [%]	U-Value EN 673 (15K) W/(m ² K)
4 - 16 - 4	2	argon *	66	26	96	42	1.1
4 - 16 - 4	2	air	66	26	96	42	1.3

* Gas filling rate 90%

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

Disclaimer: The information contained in this publication is a general description of the product ClimaGuard® Solar 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® Solar is appropriate and complies with all relevant laws, regulations, standards, codes of practices and other requirements. It is recommended that fabricators of ClimaGuard® Solar 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® Solar or can be obtained directly from GUARDIAN.