



**CLIMAGUARD® N**  
HIGHLY EFFECTIVE THERMAL INSULATION



Highly effective thermal insulation is an indispensable component for energy efficient and environmentally conscious construction today. GUARDIAN, equipped with state-of-the-art production facilities, is the world leader in providing the products you need.

Using GUARDIAN **ClimaGuard®** products will not only have a positive effect on your purse but also make an active contribution to environmental protection.



## PRODUCT DESCRIPTION

GUARDIAN **ClimaGuard® N** is a soft-coating thermal insulation glass meeting the highest performance and quality standards.

It is able to meet highest requirements with regard to thermal insulation, transparency and homogeneity. The product is subject to stringent quality control so that GUARDIAN can ensure its customers receive a uniformly high quality product.





## COMFORT AS A NEW STANDARD

A natural and healthy living and working climate in residential buildings is an important factor for a high quality of life.

With its particularly high visible transmission which is close to that of conventional glazing, and a perfect colour neutrality in terms of transparency and reflection, **ClimaGuard® N** ensures highest residential comfort - and not only on dark winter days.



## PROPERTIES AND FUNCTION

Modern thermal insulation glass, which, on the one hand, ensures low U-values as a result of highly developed coatings also reduce possible solar energy gains because of their also relatively low overall energy transmittance.

However **ClimaGuard® N**, while ensuring the excellent U-value of 1.2 W/m<sup>2</sup>K (EN 673, ΔT 15K), also has a remarkably high energy transmittance (g = 66 %, EN 410), which makes it possible to utilize free-of-charge solar energy for a particularly positive thermal balance of a building.



In order to secure a high flexibility and short lead times, with **ClimaGuard® NT** is a special, colour adapted, heat-treatable version available.



## PERFORMANCE DATA

Insulating Glass Unit	Coating on Glazing Surface	Gas Filling	Light Transmission [%]	Light Reflection [%]	Colour Rendering Index Ra	Solar Factor EN 410 [%]	U <sub>g</sub> -Value EN 673 (15K) [W/(m <sup>2</sup> K)]
4-12-4	3	Air	80	12	98	66	1,6
4-16-4	3	Argon	80	12	98	66	1,2
4-16-4-16-4	2+5	Argon	71	14	97	53	0,6
4-12-4-12-4	2+5	Krypton	71	14	97	53	0,5

Gas filling rate: 90%

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

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

