

■ The performance values shown are nominal and subject to variations due to manufacturing tolerances. Spectra-photometric values according to EN 410; U-values according to EN 673.

■ 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 in compliance with the applicable laws and regulations. Please contact your local Guardian representative to obtain any applicable handling and fabrication guides and for the most current product information.

MONOLITHIC APPLICATION - 4MM FLOAT EXTRACLEAR®

PRODUCT	KEY BENEFIT	COATING POSITION	LIGHT TRANSMISSION [%]	Ug [W/(m².K)]	REFLECTION EXTERNAL [%]
Float ExtraClear	-	-	91	5,8	8
ThermaGuard nrG	Thermal Insulation + Heatable	#2	88	3,8	10
ThermaGuard AR	High visibility	#1,2	98	5,8	1
ThermaGuard nrG/AR	Thermal Insulation + Heatable + Improved Visibility	AR #1 nrG #2	91	3,8	6

DOUBLE IG UNITS APPLICATIONS - 4MM-14MM-4MM EXTRACLEAR®

PRODUCT	KEY BENEFIT	COATING POSITION	LIGHT TRANSMISSION [%]	Ug* [W/(m².K)]	REFLECTION EXTERNAL [%]
ThermaGuard 3Plus	Thermal Insulation	#3	81	1,1	13
ThermaGuard AR	High Visibility	#1,2,3,4	95	2,6	1
ThermaGuard 3Plus/AR	Thermal Insulation + Improved Visibility	AR #1,2,4 3Plus #3	90	1,1	3
ThermaGuard 3Plus/nrG/AR	Thermal insulation + Heatable + Improved Visibility	AR #1,4 nrG #2 3Plus #3	84	1,1	8

*gas filling Argon 90%

TRIPLE IG UNITS APPLICATIONS - 4MM-14MM-4MM-14MM-4MM EXTRACLEAR®

PRODUCT	KEY BENEFIT	COATING POSITION	LIGHT TRANSMISSION [%]	Ug* [W/(m².K)]	REFLECTION EXTERNAL [%]
ThermaGuard 3Plus	Thermal Insulation	#2,5	73	0,6	17
ThermaGuard 3Plus/AR	Thermal Insulation + Improved Visibility	AR #1,2 3Plus #3,5	78	0,6	10
ThermaGuard 3Plus/nrG	Thermal Insulation + Heatable	nrG #2 3Plus #3,5	71	0,6	18
ThermaGuard AR/3Plus/nrG	Thermal insulation + Heatable + Improved Visibility	AR #1,4,6 nrG #2 3Plus #3,5	78	0,6	10

*gas filling Argon 90%



GLASS FOR COMMERCIAL REFRIGERATION

THE OPTIMAL SHOPPING EXPERIENCE

GLASS FOR COMMERCIAL REFRIGERATION

In supermarkets and other food retail outlets, commercial refrigeration units such as cooling cabinets, freezer units, wine coolers and horizontal cooling counters play a vital role, not only in keeping the goods inside cool, but also ensuring that the goods look enticing at all times.



Guardian ThermaGuard

HOW WE CAN HELP YOU

As a manufacturer of refrigeration units, selecting the right glass for your products is essential. Energy-efficient glass can help retailers reduce their carbon footprint, while high performance glass allows shoppers to see clear through to the products.

By choosing glass products that offer the ideal combination of performance and aesthetics – enhanced transparency, low reflection and energy efficiency – you help avoid distractions through the glass.

Think of our glass like this: while it creates a physical barrier to keep the cool inside, we then make it disappear, leaving the goods behind the glass clearly visible.

GUARDIAN THERMAGUARD® PRODUCT RANGE OFFERS A WIDE VARIETY OF SOLUTIONS

The Guardian ThermaGuard® product family for commercial refrigeration glass and insulating glass units offers exceptional choice in maximising energy savings and achieving high visibility.

ThermaGuard 3 Plus and ThermaGuard nrG

thermal insulation glass keeps vertical and horizontal refrigeration units cool and energy efficient.

ThermaGuard AR creates an optimal shopping experience by providing an excellent view, ensuring this doesn't cloud a shopper's view of the merchandise.

HYBRID SOLUTIONS - THE BEST OF BOTH WORLDS

As a glass manufacturer, our challenge is to provide glass products that offer the ideal combination of attributes for your application. The good news is you no longer need to choose between a high transparency coating and a thermal insulating coating for refrigeration units. With our hybrid solutions, we can offer you a product that combines the best attributes of both.

ThermaGuard 3 Plus/AR is our unique hybrid solution for IGU applications. It offers you the best of both worlds. It combines the advantages of the ThermaGuard AR low reflection coating with the ThermaGuard 3 Plus low-E coating. Plus, our coating can be bent, silk-printed and heat treatable to further meet any project requirements.

THERMAGUARD ADVANTAGES AT A GLANCE:

- Comprehensive range of anti-reflective and low-E coatings for monolithic and IGU applications, including unique combinations (hybrid solutions).
- Our low-e coatings help saving energy usage and therefore may help reduce retailers' operating costs.
- High light transmission, low reflection and

colour neutrality for better visibility of the goods and clear views at all times.

- Silk-screening is possible on all coatings.
- All products can be heat treated, and bent.

Technical support to achieve “best-in-class” quality and efficiency during glass processing. Development of tailored solutions that facilitate innovation from a single source.