



THERMA-GLASS®

UNIQUE THERMAL PROTECTIVE COATING FOR GLASS SURFACES
BLOCK THE HEAT, NOT THE VIEW



GREENGUARDTECHNOLOGIES.COM



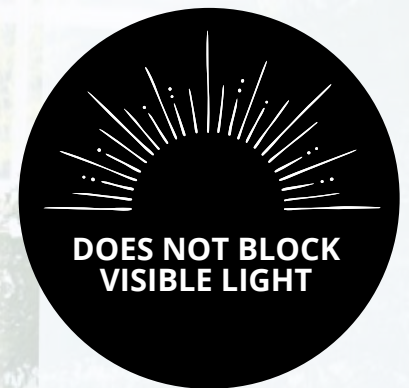
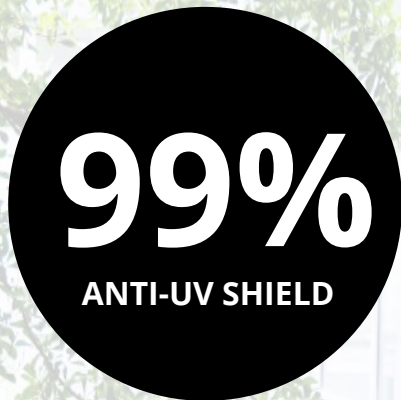
THERMA-GLASS

THERMAL PROTECTION GLASS SURFACE

THERMA-GLASS is a liquid, transparent coating for glass surfaces, which increases the thermal comfort of your home in summer and winter.

Applicable on glazed surfaces, **THERMA-GLASS** forms a transparent film by drying, creating a real thermal barrier on the surface of the glass.

The micro-particles in **THERMA-GLASS** will filter sunlight, block 99% of ultraviolet (UV) and 85% of infrared (IR) rays, but let natural light through your windows.



APPLIES DIRECTLY TO THE GLASS

COOL IN SUMMER **KEEP THE HEAT IN WINTER**



THERMA-GLASS

AN INNOVATION FOR OPTIMAL THERMAL COMFORT



ROOM TEMPERATURE REDUCE UP TO 53°F/12°C IN SUMMER.



QUICKLY TRANSFORM YOUR GLASS SURFACES INTO THERMAL SHIELD.



ADHERES PERMANENTLY TO THE GLASS SURFACE, GUARANTEEING PROTECTION FOR AT LEAST 15 YEARS.



SIGNIFICANT REDUCTION IN AIR CONDITIONING AND HEATING COSTS.



BLOCKS UP TO 85% OF INFRARED (IR)



RAY. BLOCKS 99% OF ULTRAVIOLET (UV) RAYS.



AN ALL-SEASON ENERGY EFFICIENT SOLUTION

As the climate crisis continues to worsen and energy costs rise, **THERMA-GLASS** presents itself as an innovative solution to address these challenges by improving the thermal comfort of buildings while reducing energy consumption.

Its simplicity of application is a distinctive element. As a transparent liquid coating designed to be applied to glass surfaces, it offers exceptional flexibility.

In summer, the transparent coating acts as a shield against heat, reflecting infrared rays from the sun and keeping the cool inside.

In winter, it offers effective thermal insulation, preserving indoor heat while allowing natural light to pass through.

POSSIBLE APPLICATIONS



HOMES



CAFÉS-RESTAURANTS
HOTELS



BUILDINGS - OFFICES



COMMERCIAL



HOSPITALS



EXHIBITION HALLS
-AIRPORTS

THERMA GLASS

IN FULL TRANSPARENCY



BLOCKS UV RAYS



ULTIMATE THERMAL PROTECTION



HEAT SHIELD ALL-SEASON



DURABLE PROTECTION



ENERGY SAVER & ECO-RESPONSIBLE



EASY MAINTENANCE



BLOCKS UV RAYS

THERMA-GLASS blocks 99% of UV rays and reduces sun damage and discolouration on flooring and furniture.

ULTIMATE THERMAL PROTECTION

THERMA-GLASS blocks up to 85% of IR rays, allowing a reduction of room temperature on average of 12°C in summer.

ALL-SEASON HEAT SHIELD

THERMA-GLASS acts as an effective insulating layer that allows warmer rooms in winter and cooler rooms in summer.

HIGH DURABILITY

The 9H hardness of the **THERMA-GLASS** makes it resistant to scratches. It does not take off and does not require any special maintenance.

ENERGY SAVING AND ENVIRONMENTALLY FRIENDLY

THERMA-GLASS also reduces air conditioning and heating costs, saving up to 30% of energy and reducing CO2 emissions.

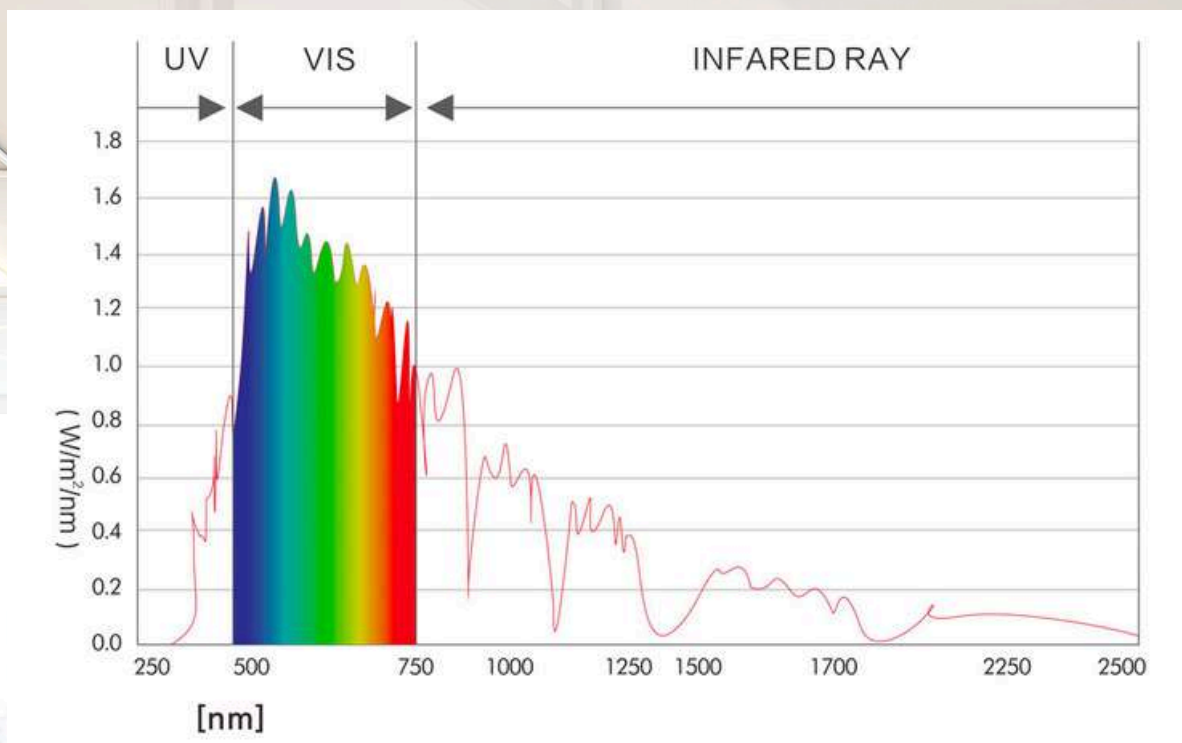
THERMA GLASS

A SELECTIVE ABSORPTION COATING

The technology used in the **THERMA-GLASS** originates in the coatings developed by the military aircraft industry for stealth aircraft.

Stealth aircraft use absorbent coatings to reduce their radar signature. These substances are applied to the outer surface of the aircraft, forming an absorbent layer that reduces the reflection of radar waves.

This is the wavelength-selective coating principle found in **THERMA-GLASS**



99%

ANTI-UV SHIELD

THERMA-GLASS does not allow UV light to pass through at wavelengths of 290 nm-400 nm. Ultraviolet radiation is responsible for the discolouration of furniture and floor coverings.



DOES NOT BLOCK
VISIBLE LIGHT

0% of the spectrum of the visible blocked

THERMA-GLASS does not block wavelengths of 400nm-760nm. Visible wavelengths are essential for photosynthesis and plant development.



UP TO
85%

OF INFRA-RED
BLOCKED

Up to 85% of blocked infrared

THERMA-GLASS also blocks infrared radiation of wavelength 700nm-1400nm. The reflection of these near infrared rays considerably reduces the heat of the solar radiation.

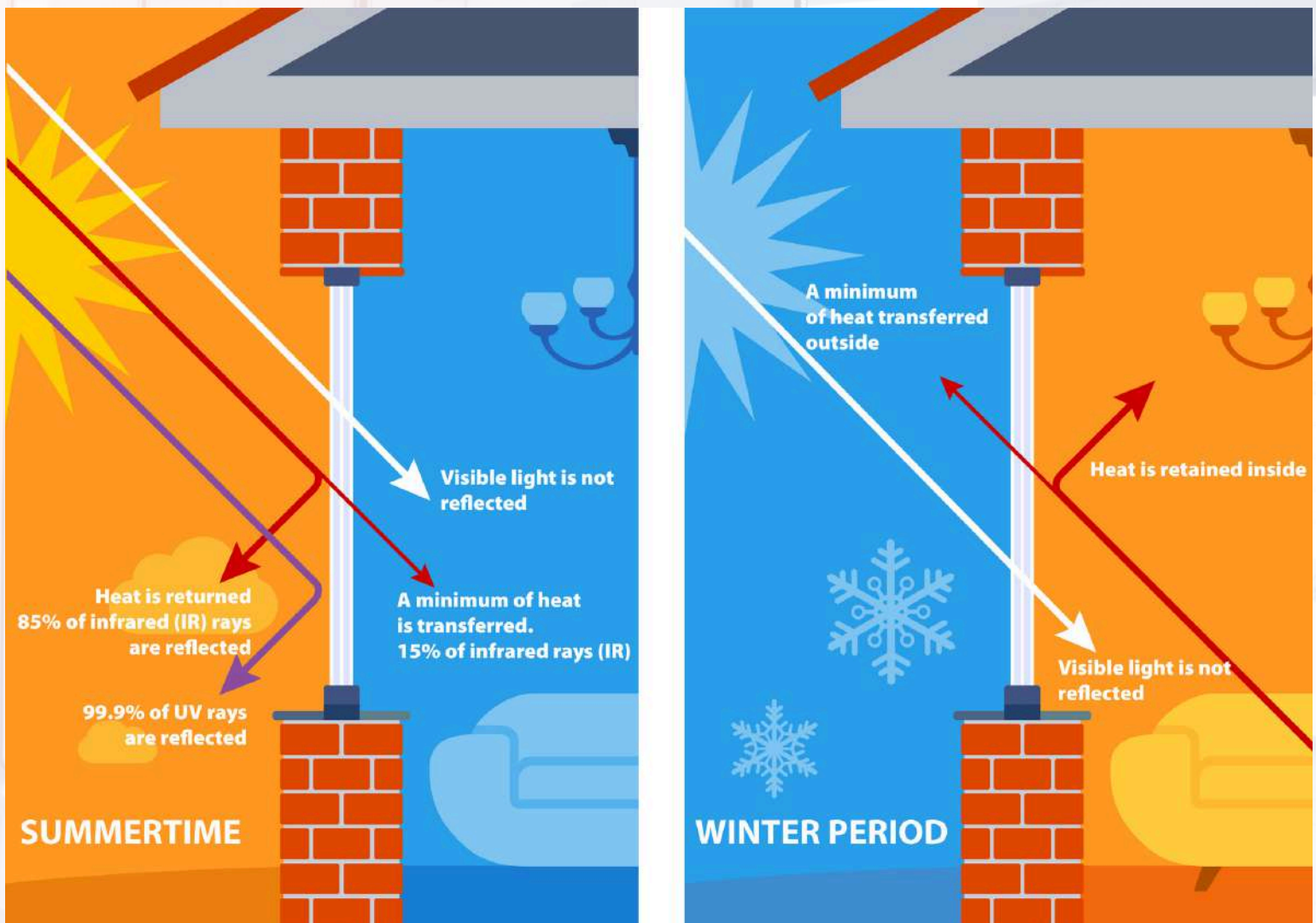
THERMA GLASS

OPTIMAL THERMAL COMFORT ALL YEAR ROUND

Heat loss occurs through the walls that touch the outside—the roof, walls, and windows. The latter can be responsible for 20% of these heat losses.

THERMA-GLASS is extremely efficient at saving energy in winter thanks to its advanced thermal insulation properties.

THERMA-GLASS acts as a thermal barrier, preventing indoor heat from escaping through windows. The special micro-particles contained in the coating reduce thermal conductivity, thereby minimizing radiation heat loss. This results in a significant reduction in energy costs and a minimal carbon footprint, thus contributing to a more sustainable environment.



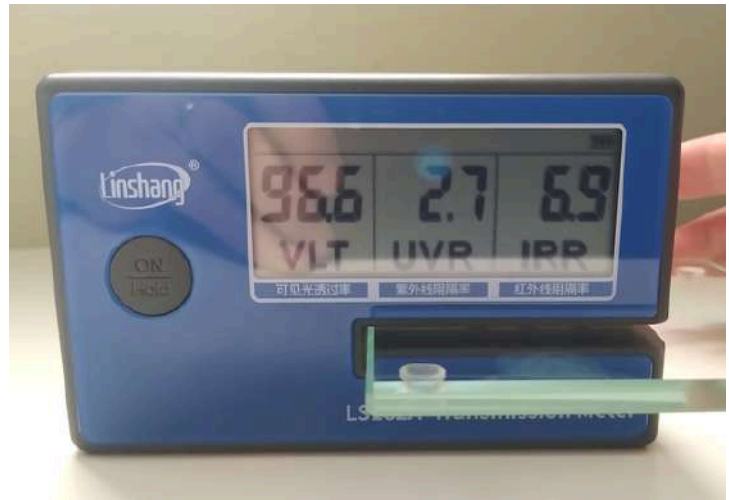
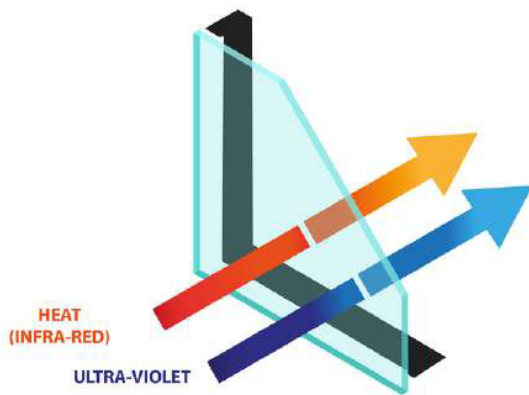
THERMA GLASS

SCIENTIFICALLY PROVEN EFFICACY

To test the effectiveness of our **THERMA-GLASS** our laboratory uses a device capable of simultaneously measuring the transmission of ultraviolet, infrared and visible light.

The apparatus shall have a test slot in which the glass pane to be tested is placed. The meter uses an ultraviolet light source, an infrared light source and a visible light source to illuminate the transparent material under test. The sensor determines the transmission by detecting the original light intensity emitted by the three light sources and the transmitted light intensity after the light has passed through the transparent material. The final result is expressed as a percentage.

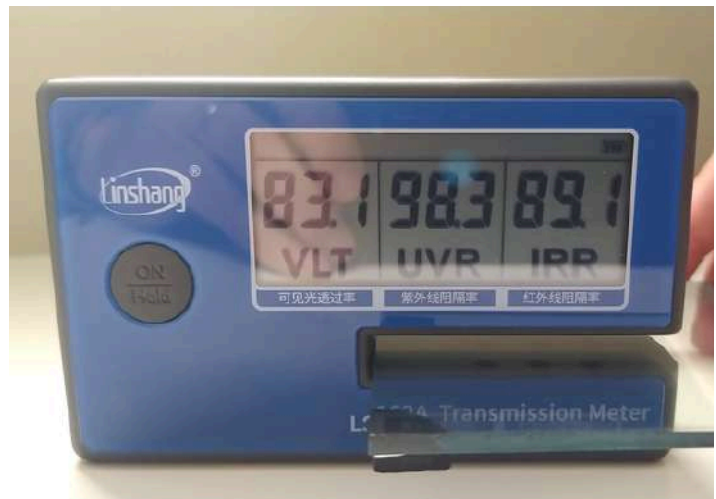
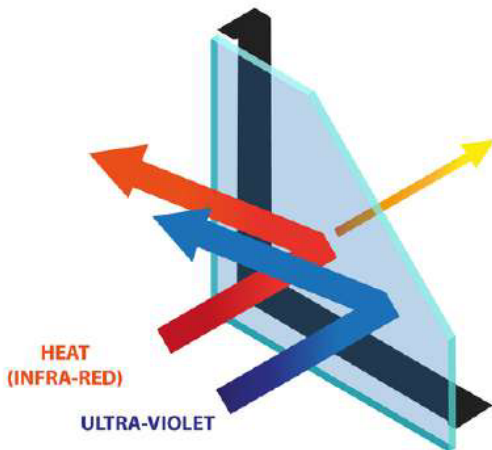
WITHOUT THERMA-GLASS® TREATMENT



Untreated glass allows heat and UV rays to pass through.

The test window naturally blocks: 2.7% of UV and 6.9% of IR

AFTER THERMA-GLASS® TREATMENT



Glass treated with **VITRO'REFLECT®** blocks 99.9% of UV and up to 85% of IR

This window treated with **THERMA-GLASS** blocks: 98.3% of UV and 89.1% of IR

THERMA GLASS

SUPERIOR TO SOLAR FILMS

SOLAR FILMS



- Not applicable to all glazed surfaces.
- Application is often long and tedious.
- Joining lines are visible in large glass frames.
- Tear easily when exposed to inclement weather. Scratches easily.

THERMA-GLASS



- Applicable to all types of glass.
- Easy and fast application.
- **THERMA-GLASS** forms a uniform film over the entire surface of the glazing.
- Resist all year - Don't take off in the sun.
- Scratch resistant (surface hardness 9H).
- Applicable to the outer or inner face of the glazing.
- Durability is 15 years minimum.

THERMA GLASS

A MULTI-BENEFIT SOLUTION



COMFORT
Reduce indoor temperature



ENERGY SAVING
Significant reduction in air conditioning & heating costs



UV BLOCKER Blocks 99.99% UV



DURABILITY
Guaranteed water protection minus 15 years.



ÉCONOMICAL
Avoid changing windows.



DON'T BLOCK THE LIGHT
Does not cause damage to plants.



SIMPLICITY OF APPLICATION
Simple and fast application not requiring the closure of premises.



PRATICAL
Cleans up like a classic window.

THERMA GLASS

DATA SHEET

SPECIFICATIONS

Characteristic	Value
Appearance	Clear blue-green liquid
Composition	Metal oxide particles in scattering
Blocked IR %	Up to 85%
% UV Blocked	99.99%
Visible Light Transmittance (VLT)	68-85%
Shading Coefficient (SC)	0.4 - 0.67
Hardness	8-9H
pH	7.0 ± 0.5
Density	0.9 - 1.1 g/cm ³
Durability	Over 15 years
Consumption	Up to 530 sq. ft./50 m ² /liter/33 oz
Toxicity	Non-toxic - Free of heavy metals
Application temperature	41°F/5°C and 77°F/25°C
Drying time	45 minutes
Number of Layers	1
Energy saving	An average of 30% or more



Creating a More Sustainable Environment

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