



ULTRASOL

REFLECTION • ABSORPTION • INSULATION

FOR WINDOWS

ULTRASOL

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Ultrasol is a **cost effective, energy efficient and non-disruptive solution** to window replacement.

Ultrasol **reduces thermal discomfort** while **minimising energy costs** within the building or home.

Compatible with all types of windows, Ultrasol will dramatically improve the thermal performance and thermal comfort of your building.

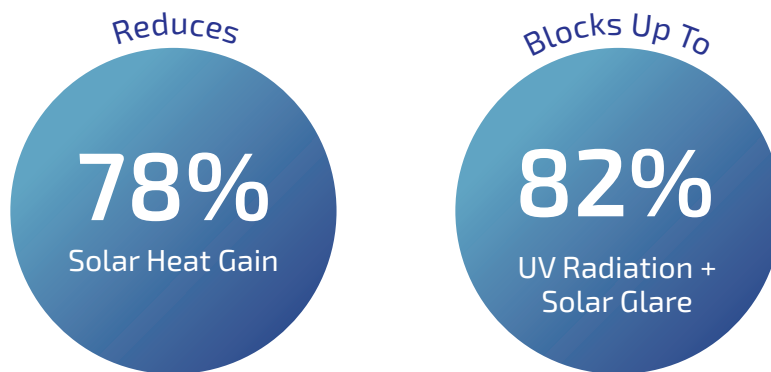
REDUCE THERMAL DISCOMFORT

Australia has one of the driest and hottest environments on earth. **Ultrasol performs better than double glazing** at protecting homes or buildings from external heat. In many buildings, space heating and cooling accounts for **40-65% of energy costs**. Without the right protection most of that energy is **lost straight out the window**.

Windows allow outside visibility and provide natural day light for our homes and buildings. However, windows are the thermal holes of a building and can be a major source of unwanted heat gain in summer and significant heat loss in winter.

Through **reflection, absorption, and insulation**, Ultrasol addresses each thermal performance issue created by windows while **maintaining visibility and light entry**.

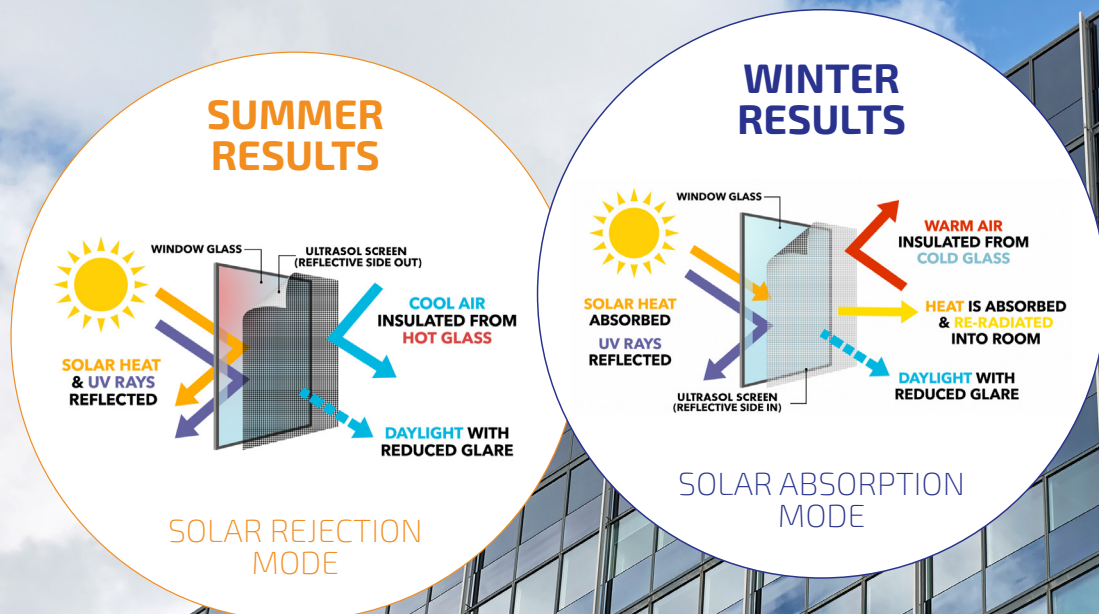
Ultrasol technology is a single application solution that combats all methods of heat transfer and energy loss through glass, with minimal obstruction of natural light or views to the outside.



When professionally installed, Ultrasol is a uniquely engineered solution to thermal transfer issues with windows. Ultrasol **works effectively in both summer and winter** to thermally balance the rooms within your home or building.

UNDERSTANDING ULTRASOL

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Ultrasol is a uniquely engineered solution that provides solar filtering and can be applied in a range of installation options to suit each individual home or building's interior design. Ultrasol **works all year** by helping strengthen the deficiencies of the weakest thermal element in any home or building, glass, and aids in stabilising indoor temperatures by a process of **reflection, absorption, and insulation**.

Ultrasol allows natural light in, while **reflecting out solar heat** and absorbing damaging ultraviolet light to **create a safer, more comfortable environment** along with **lower energy bills**.

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PRINCIPLES OF ULTRASOL

REFLECTION

Ultrasol reflects heat due to the innovative dielectric coatings of aluminium with high and low refractive indexes applied to one side of the product. Heat rejection by this aluminium layer, means the rejected heat does not have to be removed by the buildings HVAC system. This results in a **reduction of electricity consumption**, and may **prolong the productive life of HVAC units**.

ABSORPTION

Ultrasol includes a sheet of UV filtering polymer, this polymer **absorbs and blocks out up to 82% of harmful ultraviolet light** protecting occupants, carpets, furniture and pictures from the damaging effects of ultraviolet light.

INSULATION

Ultrasol is installed as a sealed panel, inserted to the inside of the glass window, successfully insulating the room, increasing the thermal protection and insulation value of the building.

Through **reflection, absorption, and insulation**, Ultrasol will help reduce heat gain during the summer and heat loss during winter.



SPECIFICATIONS

Ultrasol is the result of many years of research and development, refined into the product we offer you today. Compliant with AS1530.3, Ultrasol installed as a fixed frame, is deemed to satisfy under BCA Section J requirements as a double-glazing alternative to achieve a minimum 6 Star Rating.

VISIBLE LIGHT TRANSMISSION	
Daylight Illumination	over 4850 LUX
Transmittance	27%

KEY PERFORMANCE INDICATORS	
UV Light/Rays Blocked	82%
Infrared Light/Rays Blocked	84%
Emissivity	0.9%
Total Solar Energy Rejected	82%

TECHNICAL SPECIFICATIONS	
Weight (g/m ²)	96.7
Thickness (mm)	0.15
Flame Spread Index	0
Smoke Development Index	142
Tensile Strength (MPA)	(MD) ≥60 (TD) ≥75
Elongation at Max Load	(MD) ≤65% (TD) ≤65%

SOLAR HEAT GAIN BLOCKED		
GLASS TYPE	UNPROTECTED	WITH ULTRASOL
Single Pane	13%	82%
Double Pane	36%	86%
Low E	40%	88%
Ultrasol Only	78%	

SOLAR HEAT GAIN ABSORBED		
INCREASE OF 750% WITH ULTRASOL		
Single Pane	6%	46%

LIFESPAN/COMPLIANCE	
Degradation at 25 years	none
Manufacturer warranty	7 years
Compliant with AS 1530.3	
Deemed to satisfy as a double glazing alternative to meet the Energy Star Rating Legislation for Buildings in Australia	



Improves your NABERS Rating



Complies to Australian Standard AS1530.3



NATA Certified by Lawrence Burkley USA

ULTRASOL

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