



EnergyGuardTM

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Selective Transmission

The Best Cover for Heating
while Inhibiting algae



**Business
Innovation
Award 2018**

IOP Institute of Physics

500 Micron



www.geobubble.co.uk

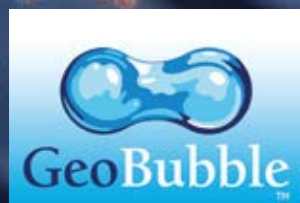


EnergyGuard™ Selective Transmission

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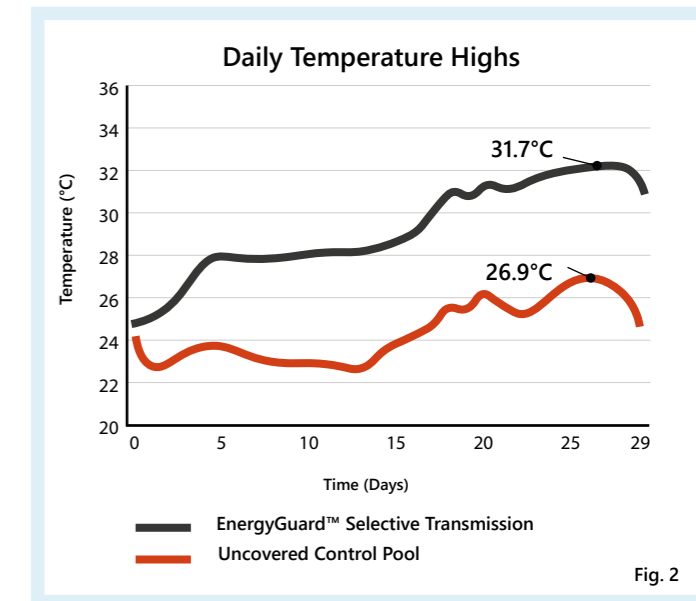
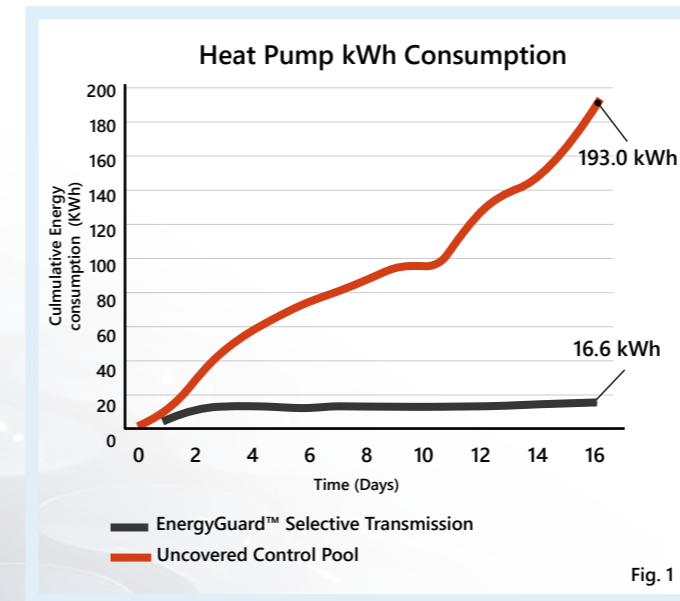
Key Benefits:

- 🔗 Award-winning material
- 🔗 Increase water temperature by up to 7°C
- 🔗 Inhibit algae growth
- 🔗 Reduce energy consumption by up to 60%
- 🔗 Reduce chemical consumption by up to 60%
- 🔗 Reduce filtration time by up to 50%
- 🔗 Can be used as a winter cover material
- 🔗 Eliminate evaporation by 98%
- 🔗 Reduce debris contamination
- 🔗 Save money and reduce the environmental impact of your pool
- 🔗 8+ years expected lifespan
- 🔗 With GeoBubble™ Technology
- 🔗 Available with reinforcing weave
- 🔗 Pay back the cost of a cover within 1 year



Award-winning Pool Cover that increases solar gains while inhibiting algae

Maximising pool temperature and inhibiting algae growth at the same time is now possible with this innovative light filtering material, meaning there is no need to compromise between temperature and chemical savings.



The above graphs reflect data from Summer 2022 testing at our bespoke testing facility in South East England. Fig. 1 shows that the test pool covered with the patented EnergyGuard™ Selective Transmission was consistently warmer than the control pool, with Fig. 2 showing a 91% lower energy consumption for the pool covered with EnergyGuard™ Selective Transmission.

This means that EnergyGuard™ Selective Transmission can also be used as an effective winter pool cover, and can be left on your pool for the entire off-season, safe in the knowledge that cleaning and opening up your pool for the summer will be a breeze.



Algae Inhibition

Offering optimised solar gains and algae inhibition, the patented EnergyGuard™ Selective Transmission now effectively delivers the best possible balance between solar heat gain, chemical and filtration reduction, making it the most innovative solar cover to date.



Selective Transmission

The bubble layer of the material uses a midnight blue pigment which gives the material its selective transmission properties. The material works as a selective filter absorbing the visible wavelengths responsible for photosynthesis. This absorbed energy is passed to the pool through conduction, while the transmission properties of the bubble layer allow for Infrared radiation (IR) to pass through the material and be directly absorbed by the water.



Heat Retention

The unique profile of the GeoBubble™ technology air cells provide this cover with both buoyancy and an insulative air gap to control heat transfer, enabling the material to manage the pool environment and keep the pool at the desired temperature.



Fig. 3
The above composite image (Fig. 3) shows pools covered with EnergyGuard™ Selective Transmission (L) and a transparent cover (R) over the winter period.

The pool covered with EnergyGuard™ Selective Transmission was significantly cleaner than the other pool.

"After using the cover the algae was dead within a week or two"

Elaine Roberts, UK



Specification Sheet

Polyethylene Film	Dual-Extruded		
UV Protection	140 kLys/yr 0.9% Additive 180 kLys/yr 1.2% Additive		
Colour	Midnight Blue		
Thermal Properties	Vicat Softening Point (1kg) 93°C		
Cold Crack Temperature	-25°C		
500 microns thickness	Bubble Film = 350 micron +/- 10%		
*758 microns thickness	Back film = 150 micron +/- 10%		
Weight per m²	*Woven top layer = 258 micron +/- 10%		
	460gms +/- 10%		
	*637gms +/- 10%		
Overall Bubble Width	2000mm / 2500mm +/- 1%		
Welding Edges	30mm +/- 10%		
Overall Width	2060mm / 2560mm +/- 10%		
Roll Diameter	0.80m +/- 1%		
Roll Length	102m +/- 2%		
Est. Quantity for 120m³ truck	2.5m = 14,535m ² = 57 rolls 2m = 15,912m ² = 78 rolls		
Est. Quantity Containers	20ft = 4,692m ² = 23 rolls 40ft = 11,220m ² = 55 rolls		
Packaging	Packaged in Polyethylene bags		
Core Diameters	Internal 76mm/External 80mm		
Identification	Batch Identification by Q.A. slip and label showing Length/Grade		
Warranty	8 year pro rata warranty		
GEOBUBBLE™ TECHNOLOGY			
Bubble Width x Length	15x30mm		
Bubble Height	5.5mm		
No. of bubble per m²	1943		
*WOVEN TOP SHEET			
	Material	Tensile Strength (N/m)	Tear Strength (N)
Warp	HDPE	50	160
Weft	HDPE	50	160

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Product information:
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