
EnergyGuard™
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Selective Transmission
The Best Cover for Heating while Inhibiting algae
Business Innovation Award 2018
IOP Institute of Physics
500 Micron
GeoBubble™
www.geobubble.co.uk

EnergyGuard™

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Selective Transmission

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

GeoBubble™

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.

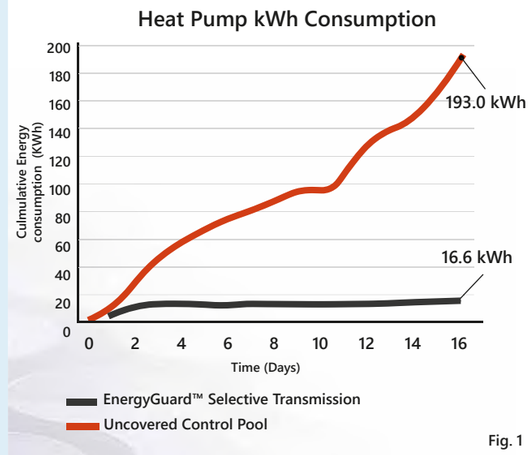


Fig. 1

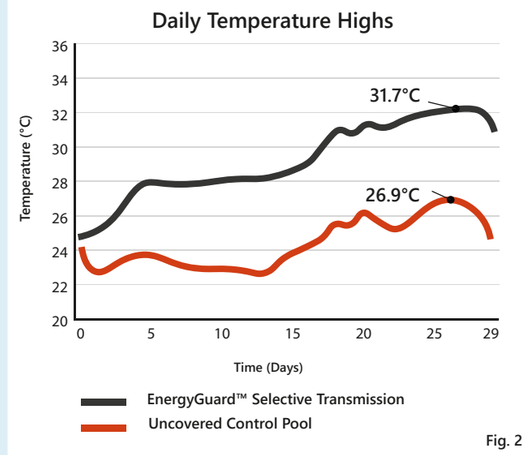


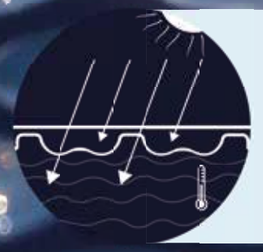
Fig. 2

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.

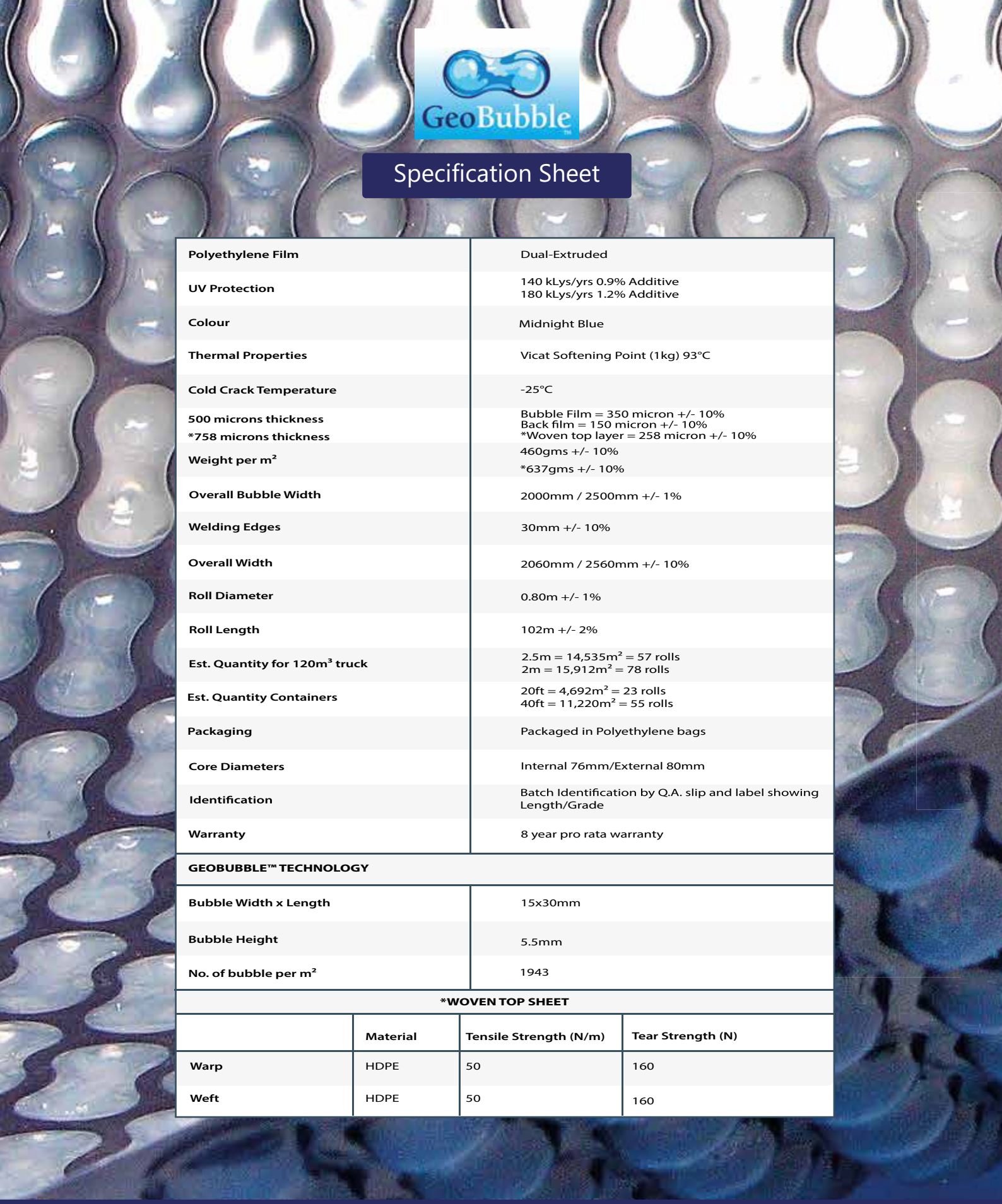
Fig. 3

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 then the other pool.

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

Elaine Roberts, UK



GeoBubble

Specification Sheet

Polyethylene Film	Dual-Extruded
UV Protection	140 kLys/yrs 0.9% Additive 180 kLys/yrs 1.2% Additive
Colour	Midnight Blue
Thermal Properties	Vicat Softening Point (1kg) 93°C
Cold Crack Temperature	-25°C
500 microns thickness ***758 microns thickness**	Bubble Film = 350 micron +/- 10% Back film = 150 micron +/- 10% *Woven top layer = 258 micron +/- 10%
Weight per m^2	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 120m^3 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 m^2	1943

***WOVEN TOP SHEET**

	Material	Tensile Strength (N/m)	Tear Strength (N)
Warp	HDPE	50	160
Weft	HDPE	50	160

Company information:
www.plastipack.co.uk

Product information:
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Water storage:
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4 LDPE

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