

# **Solar Heating**



A **FREE** alternative to heating your pool using the Poolsolar System

- Utilise the sun's natural energy
- Extend your swimming season
- Easy to install on any surface
- EPDM High quality rubber
- Free of charge for another 5 billion years
- Maintenance free
- Immediate shipment
- 5 Year warranty











Successfully providing free heat for over 30 years!



A G Budget

Visit: www.agbudget.co.uk

## Solar Heating

### Poolsolar SOLAR HEATING is a low cost alternative to heating your Above or Inground swimming pool throughout the Summer months.

In this country, unheated swimming pools only reach a pleasant temperature for a few days a year. Installing a Poolsolar system will enable you to increase your pool temperature to a pleasant level that will result in you enjoying and using your pool more than ever before, and what's more, it's free.

If you are an existing pool owner who already has a pool heater in some form or another and are fed up with paying excessive utility bills, then utilising the sun's energy for free is an ideal alternative. Poolsolar can be attached to any existing filtration plant. What better way is there than using the sun's energy to heat your pool.

# How does Poolsolar heat Up your pool?

By simply passing filtered pool water through strips of E.P.D.M quality P.V.C Solar Matting which is heated by the sun's rays. The matting is pre-fitted to P.V.C Manifolds that are connected to each other. The manifolds must be plumbed directly to the filtration plant. The amount of Poolsolar you require will depend upon the size of your pool. (see chart for details)

Where is the best place to install the Poolsolar System?
Poolsolar can be installed almost anywhere - on the roof of your house, garage, porch, summer house, pergola or directly on the lawn. The only important requirement is a sunny place i.e. south facing to ensure maximum heat absorption.

Under normal conditions you need to use only half the surface area of your pool as the collector surface i.e. a 30 x 15' pool is 450 sqft, therefore approximately 225sqft of Poolsolar matting is required. For south-east and south-westerly facing positions in cooler climates the Poolsolar matting should be increased by 35-40%.

#### What is EPDM?

EPDM is an elastomeric compound that is manufactured from from Ehtyleen Propyleen-Diene-Monomer (EPDM). These ingredients are synthesized to produce a product that exhibits a high degree of ozone, ultraviolet, weathering and abrasion resistance, and outstanding low temperature flexibility. These ingredients also contribute to resistance to acids, alkalis, and oxygenated solvents (i.e., ketones, esters,

### **EPDM** performance

and alcohols).

With over 1 billion square feet of EPDM membrane installed worldwide, EPDM has established itself as the membrane for all climatic conditions. This is supported by various laboratory studies and actual field installations. This excellent track record is the result of unique and unmatched physical characteristics:

EPDM has superior resistance to UV (ultraviolet) radiation

EPDM has unmatched resistance to thermal shock

EPDM exhibits superior resistance to cyclic fatigue

EPDM has superior resistance to hail damage

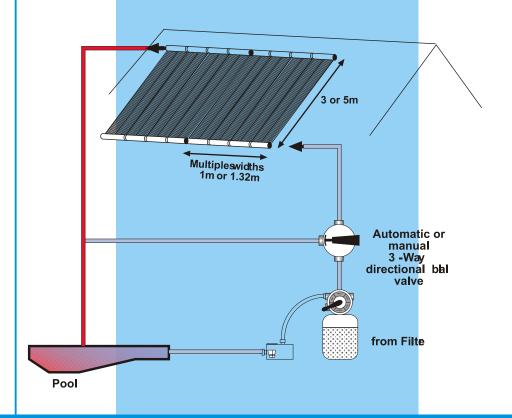
EPDM will not become brittle and will not shatter due to low temperatures

### **Environmentally friendly**

EPDM is one of the most sustainable and environmental materials used today in the construction industry. Its excellent performance transfers to low life cycle costs and less impact on the environment. EPDM can be recycled into the manufacturing of other products and accessories, thus minimizing the impact on landfills.

#### **EPDM Longevity**

With many EPDM installations exceeding 15 years of exposure in the field under various climatic conditions, none of the material tested has shown alarming signs of degradation. Even though it would be difficult to predict, studies have shown aged EPDM as having a potential life expectancy of 15 - 20 years!





# Commercial solar energy project using Poolsolar system.

A Poolsolar system was used for a commercial swimming pool based in the Netherlands. A total of 350m solar collectors were installed. The mats were put on the roof of the surrounding swimming pool-houses. The swimming pool water runs through these tubes, which are heated by the sun.

The use of solar collectors saves 8,000m natural gas per year on an expenditure of 30,000m. This resulted in energy (natural gas) saving of £5600.

### Simple To Install

There's nothing simpler than installing the Poolsolar system.

It can be assembled by any DIY enthusiast.

The self-assembly Poolsolar matting is supplied in either a 4 or 5m kit box and contains all the necessary components for you to install a solar collector. In addition you will need pool plumbing and, for roof installations, adhesive and support angles.

# **Automatic Solar Control System**

Have full control over your heating requirements. Investing in a Solar Control System will automatically turn the Poolsolar on and off depending on the weather conditions using an automatic 3-way valve.

The 3-way valve simply relaces the existing valve that you need to control the Poolsolar. When the sun is shining the valve will direct the water flow to the solar collector. When the temperature drops i.e. at night, the valve will direct the water flow back to the pool, bypassing the solar collector. Furthermore, it will stop the heating process when the desired temperature is reached.





### **Poolsolar Sizing Chart**

Some pool sizes result in requiring an additional half box, but this is not possible to supply. Therefore, we have shown the minimum and optimum number of rolls required.

For above ground swimming pools we have reduced the amount of solar collectors by 20% to allow for heat absorbtion through the steel wall structure.

Important Notes:- You will need to purchase enough solar matting to cover 50% of the pool surface area.

If a heat retention cover is not to be applied overnight you will need to double the quantities below.

Make sure your circulation pump has adequate flow to reach solar matting that is installed at roof level.

A maximum working pressure should not be above 1.5 BAR (22psi). A solar heat retention cover must be applied to the swimming pool overnight and when the pool is not in use to prevent heat loss.

If installing Poolsolar on a ground surface i.e. for small above ground or splasher type pools please be aware that Poolsolar is not designed for heavy traffic. Make sure that all pipework to and from the solar collector can be drained for the winter period.

Length Width sqft sqm	INGRO	UND	GROUND POOLS		No. of boxes Required	
26' x 13' 338 31.40 4 3 28' x 14' 392 36.42 4-5 4 30' x 14' 420 39.02 5 4 30' x 15' 450 41.81 5 4 32' x 16' 512 47.57 6 5 36' x 18' 648 60.20 7-8 6	Length W	/idth	sqft	sqm		
28' x 14' 392 36.42 4-5 4 30' x 14' 420 39.02 5 4 30' x 15' 450 41.81 5 4 32' x 16' 512 47.57 6 5 36' x 18' 648 60.20 7-8 6	24' x	12'	288	26.76	3-4	3
30' x 14' 420 39.02 5 4 30' x 15' 450 41.81 5 4 32' x 16' 512 47.57 6 5 36' x 18' 648 60.20 7-8 6	26' x	13'	338	31.40	4	3
30' x 15' 450 41.81 5 4 32' x 16' 512 47.57 6 5 36' x 18' 648 60.20 7-8 6	28' x	14'	392	36.42	4-5	4
32' x 16' 512 47.57 6 5 36' x 18' 648 60.20 7-8 6	30' x	14'	420	39.02	5	4
36' x 18' 648 60.20 7-8 6	30' x	15'	450	41.81	5	4
	32' x	16'	512	47.57	6	5
40' v 20' 800 74 32 9 7-8	36' x	18'	648	60.20	7-8	6
40 X 20 000 74.02 5 7-0	40' x	20'	800	74.32	9	7-8

ABOVE GRO	No. of boxes Required					
Length Width	sqft	sqm	Box A 4 sqm	Box B 5 sqm		
19' x 12'	228	21.18	2	2		
23' x 12'	276	25.64	2-3	2		
30' x 15'	450	41.81	4	3		
33' x 18'	594	55.18	5-6	4-5		
Dia						
12	113	10.50	1	1		
15	177	16.41	2	1-2		
18	255	23.63	2-3	2		
21	346	32.16	3	2-3		
				,		

### 4 units of solar collectors, each 33cm x 3m (4m²)(and o-rings)

- 8 metre nylon band to attach the headers and the absorber
- repair set and lubricant
- two adaptors 50mm in black ABS
- two threaded adaptors 1½" in black
- two reducing sockets in black ABS
- one threaded stop 1½" in black ABS
- tie-wraps
- installation guide

## BOX A(4m<sup>2</sup>)

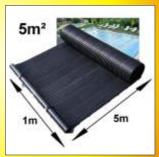
Packaged Weight 15kg 400 x 360 x 385mm



- 3 units of solar collectors, each 33cm
   x 5m (5m²)(and o-rings)
- 10 metre nylon band to attach the headers and the absorber
- repair set and lubricant
- two adaptors 50mm in black ABS
- two threaded adaptors 1½" in black
- two reducing sockets in black ABS
- one threaded stop 11/2" in black ABS
- tie-wraps
- installation guide

### BOX B(5m<sup>2</sup>)

Packaged Weight 18kg 400 x 360 x 385mm



## POOLsolar Estimated Project Cost

£ 1416-B Poolsolar 4m Box Kit 'A' - 3m x 33cm x 4 Rolls weight 15kg 1415-B Poolsolar 5m Box Kit 'B' - 5m x 33cm x 3 Rolls weight 18kg Poolsolar Vacuum Breaker (for installations above 4m high) 1419-B 3 Way Valve 1418-B Roof Support Angle per 2m Length 1410-B 300ml Roof fixing paste (2 x tubes regd per 4m or 5m box) Plumbing Allowance (see dealer) 1420-B **Automated Solar Control System** 1421-B Booster Pump 1422-B **Booster Pump Controller Delivery Charge 1-2 Boxes** Delivery Charge 3-6 Boxes Delivery Charge 7+

Total

Dealer

