POOLSOLAR

SOLAR COLLECTORS

A FREE alternative to heating your pool

using a Poolsolar System





- Utilise the sun's natural energy
- Extend your swimming season
- Easy to install on any surface
- EPDM High quality rubber
- Maintenance free



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. 10 x 5m pool is 50 sqm, therefore 25sqm 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 elastomer compound that is manufactured from Ethylene Propylene Diene Monomer rubber (EPDM). These ingredients produce a product that exhibits a high degree of ozone, ultraviolet, weathering, abrasion resistance and outstanding low temperature flexibility. These ingredients also contribute to resistance to acids, alkalis, and oxygenated solvents.

EPDM performance

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:

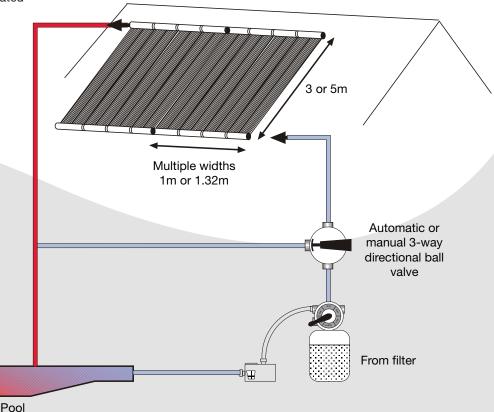
- EPDM has superior resistance to UV (ultraviolet) radiation
- EPDM has unmatched resistance to thermal shock
- EPDM exhibits superior resistance to weathering
- · EPDM has superior resistance to hail damage
- EPDM will not become brittle and will not shatter due to low temperatures.

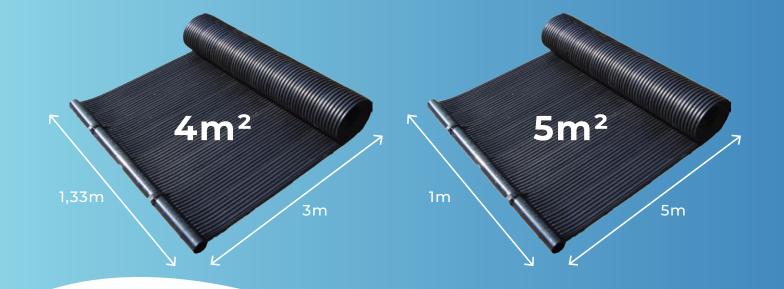
Environmentally friendly

EPDM is one of the most sustainable and environmental material 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 minimising 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.





How many boxes do I need?

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.

Inground Pools Length 26.76 3 24' 12' 288 х 26' 13' 338 31.40 4 3 Х 28' х 14' 392 36.42 4-5 4 30' 14' 420 39.02 5 Х 30' 15' 450 41.81 5 4 х 16' 512 47.57 6 5 32' х 36' 18' 648 60.20 7-8 6 Х 74.32 9 7-8 40' x 203 800

Above Ground Pools					No. of bo	No. of boxes required	
Length		Width	sqft	sqm	4m²	5m²	
19'	х	12'	228	21.18	2	2	
23'	х	12'	276	25.64	2-3	2	
30'	х	15'	450	41.81	4	3	
22'	х	18'	594	55.18	5-6	4-5	
Round							
	12' Dia	a	113	10.50	1	1	
15' Dia			117	16.41	2	1-2	
18' Dia			255	23.63	2-3	2	
21' Dia			346	32.16	3	2-3	

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.

4m² box contains

- 4 units of solar collectors (EPDM), each 33cm on 3m (4m²)
- 8 meter nylon band to attach the headers and the absorber
- 2 adapters 50 mm (ABS)
- 2 threaded adapters and stops 1 1/2" (ABS)
- 2 reducing sockets (ABS)
- Packaged weight 15kg
- Box dimensions: 400 x 360 x 385mm

5m² box contains

- 3 units of solar collectors (EPDM), each 33cm on 5m (5m²)
- 10 meter nylon band to attach the headers and the absorber
- · 2 adapters 50 mm (ABS)
- 2 threaded adapters and stops 1 1/2" (ABS)
- 2 reducing sockets (ABS)
- Packaged weight 18kg
- Box dimensions: 400 x 360 x 385mm

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 replaces 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.

Estimated Project Cost

Code	Product					
1416-B	Poolsolar 4m Box Kit 'A' - 3m x 33cm x 4 Rolls weight 15kg					
1415-B	Poolsolar 4m Box Kit 'B' - 5m x 33cm x 3 Rolls weight 18kg					
1417-B	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 reqd per 4m or 5m box)					
-	Plumbing Allowance (see dealer)					
1420-B	Automated Solar Control System					
1421-B	Booster Pump					
1422-B	Booster Pump Controller					
	Pallet Delivery Charge					
	Box dimensions: 400 x 360 x 385mm Total:					

Unpack and layout Poolsolar mat



Simply push-fit solar matting together



Purchase custom made roof support angle and adhere to roof



