Suncell solar panels are used to heat private pools as well as school, hotel and public swimming pools.

Installation Data:
Suncell panels should be fixed securely at 15° to 45° to the horizontal facing between S.E. and S.W. with a flow rate of 5 to 4 GPH (0.5 to 1 m³/hr) per panel.

Suncell Swimming Pool Solar Heating

Environmental Process Systems Limited
Unit 32, Mere View Industrial Estate, Yaxley, Cambridgeshire, PE7 3HS, United Kingdom
Tel: +44-(0)-1733 243400 Fax:+44-(0)-1733 243344 e-mail:info@epsltd.co.uk www.epsltd.co.uk

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**ENJOY A WARM POOL WITH SOLAR HEATING!**

**WHY SOLAR HEATING?**
Solar heating is ideal for swimming pools and Suncell solar panels are designed for this specific application. A pool can be expensive to heat, but without heating a pool is a wasted investment. Heating by solar is an economic and effective solution. Unlike any other means of pool heating, with solar the energy source is free and friendly to the environment.

Enjoy comfortable swimming temperatures during an extended season with a Suncell solar heating system — some persons in use over two decades by pool owners throughout the UK and overseas.

**IS THERE SUFFICIENT SUNSHINE?**
Solar panels can collect heat on bright overcast days — not just on the sunny days when their performance is of course at its best. During the average UK summer Suncell solar panels can typically heat a pool from the middle of May until late September.

Pools without any heating only really enjoy 25°C (77°F) with temperatures rarely reaching the chilly 40°C. With solar heating, temperatures can generally be achieved in the mid to high 30°C (90°F to 86°F) with temperatures sometimes well into the 40°C.

Many people are perfectly satisfied with these temperatures. If higher temperatures are required, any conventional heating system may be used in conjunction with solar to give a small extra boost. Indoor pools, in all weather conditions, will in any case require such a back-up heating system as there is not enough sunshine during the winter.

**HOW DOES IT WORK?**
The pool water is circulated through the panels which absorbs heat from the sun to warm the water. The solar panel can be installed into a water storage position, that is installed and facing roughly south. The panels should be inclined to catch the most sun and they can be tilted either at ground level or on a convenient roof. The are connected by pipes to the pool filtration system so that the water can be pumped through the panels via a way back to the pool. A simple controller ensures that the water is only diverted via the panels when the weather conditions offer a worthwhile heat gain.

**HOW MANY PANELS?**
A good deal of energy is needed to heat a pool, so a large area of solar panels is required. This applies whenever solar panels are used, including those more expensive projects intended primarily for heating the pool water rather than for pools.

For swimming pools the area of solar panels should generally equate to 25% of the pool surface area — mean if the pool is an especially exposed pool. Even in extreme weather the UK a similar panel area is required (The solar heating will be called upon to work considerably earlier and later in the year).

A floating pool cover is recommended to insulate the surface of any pool when not in use. For open air pools transparent bubble covers are ideal. We make pool covers for any size of swimming pool.

**Suncell Solar Panels**
Suncell solar panels have been manufactured since 1976, so we can draw on considerable experience in this field. (We are also leading manufacturers of Polypolyurethane A.B.S. pipes and fittings.) Our solar systems conform to BS 6795 the British Standard for Solar Heating Systems for Swimming Pools.

Our Suncell solar panels have been developed specifically for swimming pool heating. This is an ideal low temperature solar application which does not necessitate a more expensive glazed and insulated style of solar panel. Suncell panels are highly efficient for this type of application, operating at a high flow rate principle.

The Suncell panel comprises a polypolyurethane collector plate with header pipes welded to each end (illustrated below) and mounted in an aluminium frame. The use of a specially formulated grade of polypolyurethane ensures a long life and complete freedom from corrosion by pool water — even from sea water. No maintenance except cleaning for winter frost protection is required. A five year guarantee is offered subject to published conditions.

A minimum external frame surrounds the polypolyurethane matrix to enable easy attachment of the panel to a sloping roof or support frame. The header pipes are linked using hose connectors simply secured by jubilee clips.

**BENEFITS OF SOLAR HEATING**
For almost any pool, private or public, a Suncell solar heating system is a real investment. The capital cost is recovered against fuel savings, making for a highly cost effective solution to pool heating needs.

Naturally solar heating is environmentally friendly, playing its part in the conservation of valuable fuel resources and in the reducing the emission of "greenhouse gases". In this respect it leaves all other forms of heating — including heat pumps — standing. Solar is silent and pollution free.

Swimming pool heating is the one solar application widely accepted as worthwhile. The combination of solar pool heating system is perfect in phase with the months of maximum sunshine availability.

Suncell solar heating is generally straightforward to install and does not interfere with the operation of other pool equipment such as filters, pumps, heaters or chemical dosing units. It is reliable and efficient.

**Technical data on SunCell solar panels**

<table>
<thead>
<tr>
<th>Panel Type</th>
<th>Size (mm)</th>
<th>Area (m²)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SunCell 300</td>
<td>1200 wide x 230 (48 wide x 910)</td>
<td>2.40</td>
<td>11.5</td>
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<tr>
<td>SunCell 300</td>
<td>1200 wide x 330 (48 wide x 130)</td>
<td>3.60</td>
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