

# **How-To Australia**

[www.howtoaustralia.com.au](http://www.howtoaustralia.com.au)

## **A Guide to Swimming Pool Heating – General**

# How-To Australia

www.howtoaustralia.com.au

As a general rule, heating will increase your swimming season, depending on the location and type of heating used.

---

## Types of heating

---

Popular pool heating systems include gas, electric and solar. They may be installed at the time of construction or added later and they are all compatible with most types of filter and reticulation systems.

Solar energy is the most popular as it heats the water free of charge. But as solar depends on the sun, a practical alternative is to install a combination of methods, such as solar with either a gas or electric booster system.

The installation and running costs of pool heaters will vary depending on whether you choose solar, gas or electric. Another type, the heat pump, works like a reverse cycle air conditioner. It's very efficient but may be more expensive to purchase.

How much heating will be required will depend upon the location, position of the pool and the additional extra swimming time you would like to enjoy.

---

## Why Pools Cool Down

---

Over 90 per cent of a pool's heat loss is from the surface and is a combination of evaporation, convection and radiation, as discussed below:

*Evaporation* - is a continuous process, even during times when the sky is cloudy. As the water changes from a liquid to a vapour, there is also a transfer of heat energy. The heat is therefore drawn from the water, making it cooler.

*Convection* - occurs when the air moves over the surface of the water and removes heat. When it is windy and the air temperature is cooler than the water temperature, more heat is lost. It is similar to blowing on a hot drink to make it cooler.

*Radiation* - occurs when the air temperature is lower than the water temperature. The heat in the pool radiates into the atmosphere, lowering the temperature of the pool water.

---

## Solar Pool Blankets

---

Solar pool blankets can reduce evaporation by up to 97 per cent. They keep water in the pool

# How-To Australia

www.howtoaustralia.com.au

between 8 - 10°C warmer, thereby extending the swimming season. As well as being quick, easy and effective to use, pool owners will make savings on pool chemicals and water loss through evaporation. See also *A Guide to Swimming Pool Covers and Blankets*.

---

## How Solar Pool Blankets work

---

Short wavelength solar energy passes easily through the blanket (generating heat, like a magnifying glass). This heat is retained by the insulating qualities of the blanket's air pockets, meaning the blanket can heat up and cool down quickly and not waste solar energy heating itself or staying warm.

© **Direct Fusion Technologies**. This guide is for personal use only. You may not use this work for commercial purposes. It may not be copied, reproduced, sold or used for any other purpose without the express permission of Direct Fusion Technologies. The text, images and articles themselves are copyright their of respective owners.

For our full Terms check <http://howtoaustralia.com.au/terms-of-use/>