

Disadvantages of Solar Panel Pool Heating



Although solar pool heaters are seen as environmentally friendly, non-polluting sources of energy that can help save you money while saving the planet, there are some significant downsides to having your pool heated by solar power.

Before you make an investment in this apparently green technology, invest a little time in researching the facts.

There are a few major disadvantages of solar pool heaters that make solar panels idealistically appealing, but realistically foolish.

Expensive Initial Investment

Solar pool heaters may sound great on paper because they harvest the free energy of the sun to heat your pool. Unfortunately the disadvantage of installing an eco-friendly solar pool heater panel is its initial investment.

Anywhere from \$7,000 to \$10,000 for a 30 to 40 square meter pool. These costs do not include any special installation requirements your pool may need.

Design Clash

Even the most elegantly designed solar pool heater is not aesthetically appealing.

Solar pool heater panels are poorly equipped to handle the shade from trees, nearby buildings and are problematic in locations close to the ocean.

As New Zealand is a cooler climate an installation will require more panels to achieve the required heating capacity. In fact some homes will simply

not have enough suitable roof space available to mount all the panels required.

Not Independent and Not On Demand

Solar pool heater panels cannot provide comparable heating, when compared to a Premier Heat Pumps pool heater, they cannot operate independently and provide heating capability on cloudy days or at night. Solar panels rely on an additional water pump to circulate water from the pool through the panel “collecting” the heat from the panel and returning it to the pool. In some cases this pump alone may use nearly 40% of the power of a “Premier heat pump” On windy days the solar panel may actually act to cool the pool water that passes through it resulting in lowering the temperature of the pool.

It May Not Be Cheaper

Depending on your location, installation and maintenance costs could be significant. It is a fallacy that solar heating is inert requiring no further attention after initial installation. These “low-maintenance devices” must be serviced by solar contractors on a regular basis and this can be expensive.

Before jumping onto the solar panel bandwagon, consider and compare the cost of installing a solar pool heater panel, the maintenance disadvantage and the comparable low efficiency of the solar pool heater when compared to the cost and efficiency of a heat pump pool heater from Premier Heat Pumps.

Solar Heating System

There are two broad types of solar heating systems: glazed and unglazed. Unglazed systems are predominately used for pool heating due to their lower installation cost.

Unglazed systems are made from rubber or polypropylene, with the latter being the longer lasting due to the increased UV resistance. Polypropylene solar collectors are generally more expensive than rubber systems.

The disadvantage of unglazed solar systems is that they lose heat in windy conditions (leading to cooling of the pool) and do not perform at all on cold or overcast days.

Glazed solar systems do perform in colder and windier climates, but have a significantly higher installation cost.

Conclusion

Solar heating may be a viable option in very sheltered sites that have long periods of uninterrupted sun and a suitable amount of roof space orientated in the best way. In New Zealand we have very few sites that would meet the criteria for being “ideal” for solar.

A Premier Heat Pump can be installed in any location and will provide reliable on demand heat in the most efficient way.

This is why we now use heat pumps to heat our offices and homes, rather than simply relying on the Sun's natural radiation.