

## How effective is the Heat Collector?

<p><b>Works when there is sunlight</b></p>	<p>The Sun Lizard relies on the sun. The performance is directly related to how much sun you get each day and will vary depending on your location and your level of solar radiation.</p>
<p><b>Increases air temperature by 30° C</b></p>	<p>Each collector can raise the temperature of air by 30° C over the inlet air temperature. Each collector is designed to allow up to 6m<sup>3</sup>/min of air to pass through in order to reach this temperature. More air flow will reduce the temperature and increase resistance and the energy required to run the fans. Less airflow will result in higher temperatures.</p>
<p><b>Additional collector in series raises temperature by up to 50%</b></p>	<p>Combining collectors in series will result in an increase in temperature but reducing the effectiveness by a factor of approximately 50% for each collector, eg. Two collectors will add 30 degrees plus 15 degrees, three collectors will add 30 plus 15 plus 7 degrees. So there is a diminishing return. If a higher temperature gain is critical, we suggest slowing down the air flow and add parallel collectors.</p>
<p><b>Reduces electricity bills &amp; GHG emissions</b></p>	<p>Adding a small electric heater to warm up other rooms could potentially add around \$200-\$400 a year to your electricity bills as well as the cost of the heater. This is up to 4 tonnes CO<sub>2</sub>E of greenhouse gases as well as the money.</p>
<p><b>Recommended area of up to 100m<sup>2</sup> and an average ceiling height of 2.7 m.</b></p>	<p>Each collector can naturally warm an area of 50-100m<sup>2</sup> of a typical domestic or commercial building. Ceiling heights over 3m will lower the effective heating area.</p>

## Other products in the Sun Lizard Suite

### Solar Climate Control System

A completely solar powered heating and cooling system

### Solar Heat Extractor

Effectively remove heat from a building and introduce cooler air and ventilation.

### Solar Air Shifter

Distribute warm or cool air more effectively throughout a building to improve comfort and reduce the need for other expensive systems.

For local distributors and installers or for more information, contact our head office or please visit our web site: [www.sunlizard.com.au](http://www.sunlizard.com.au)

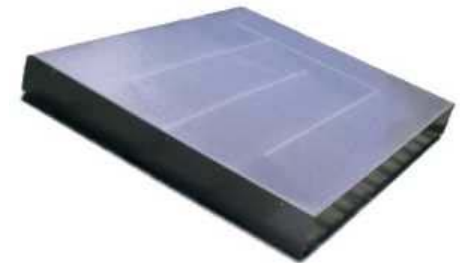



**Alternative Fuels & Energy**  
 Fuels and Energy for a Sustainable Future  
 PO Box 276 P: (03) 9722 9596 E: [sales@sunlizard.com.au](mailto:sales@sunlizard.com.au)  
 Mt Evelyn F: (03) 9723 0253 W: [www.sunlizard.com.au](http://www.sunlizard.com.au)  
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*Your Solar Climate Control System*

## Sun Lizard Solar Heat Collector

The Sun Lizard Solar Heat Collectors are an effective way to improve the energy efficiency of existing and new heating systems by preheating the incoming air. This eases the load on the mainstream heating system, which uses less fuel. Such a configuration is suitable for residential, commercial, industrial and agricultural systems of all sizes.

The unique and specially designed solar collectors are an extremely efficient way to heat air using the sun. This heated air can then be transferred to your building using fans and ducting.

The Heat Collectors can be installed as a single unit, or can be built into arrays of multiple units depending on airflow volume requirements.

This gives you great flexibility in designing a heating system that uses free solar energy.

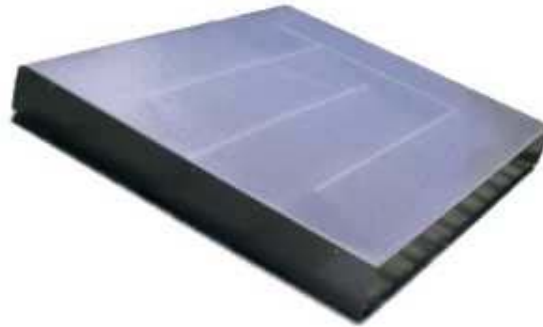
### Available Systems

The Sun Lizard Solar Heat Collectors are available in left and right ducted versions to suit most installations

 <p><b>Solar Heat Collector</b></p> <p>Suitable for areas around 50-100sqm</p>	 <p><b>Array of Solar Heat Collectors</b></p> <p>Suitable for large scale commercial, industrial and agricultural systems</p>
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## How Does the Solar Heat Collector Work?

The Solar Heat Collector captures solar heat energy and transfers that heat to air that is directed into an existing or new heating system. You can combine one or more collectors into an array that will provide the total airflow volume that you need for your application. At the recommended airflow volume per collector, the air will be preheated by up to 30 degrees.

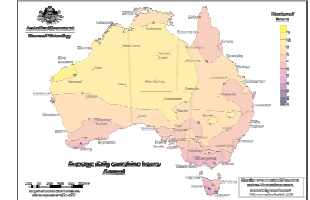


Sun Lizard Solar Heat Collector

Most heating systems recycle room air to minimise the loss of heat energy, with a small volume of outside air being introduced to maintain air quality. While the sun is shining, the Sun Lizard Solar Heat Collector is an important part of this process. However, after sunset and during periods of heavy cloud, the Sun Lizard Solar Heat Collector should be removed from this cycle. This can be achieved easily and automatically through the use of simple, thermostatically controlled air flow control boxes.

The collectors need to be mounted facing north to get maximum benefit. Specially designed frames are available to elevate and orientate the collectors if they are not able to easily face north.

To find the potential amount of hours of free solar energy, visit the Bureau of Meteorology web site ([www.bom.gov.au](http://www.bom.gov.au)). You can view maps of the average daily sunshine hours for each area of Australia



City	Average Sunlight Hrs per day (May- Sept)	Average Sunlight Hrs per Day (Oct – Apr)
Sydney	6-7 hours	7-8 hours
Melbourne	4-5 hours	7-8 hours
Brisbane	7-8 hours	7-8 hours
Adelaide	5-6 hours	8-9 hours
Perth	5-6 hours	9-10 hours
Hobart	4-5 hours	6-7 hours
ACT	5-6 hours	8-9 hours