## How effective is the Heat Extractor?

| | |
|---|---|
| **Works all day and night** | When there is sunlight, the Solar Heat Extractor works all day for free using the sun's energy to power the fans and at night it can automatically switch to mains power to continue generating the air movement. |
| **Moves air at 6m$^3$/min** | Removes up to 6m$^3$/minute of hot air and replaces it with cooler air from another location. |
| **Up to 10$^o$ Cooler in Summer** | Your room can be up to 10 degrees C cooler and better ventilated during summer. |
| **Reduces reliance on air conditioners** | Just a 2-3 degree change in temperature, plus the gentle air movement is often sufficient to eliminate the need for additional mains powered heating or cooling. If you do need more heating or cooling, that is 2-3 degrees of temperature change that you don't have to pay for. |
| **Keeps your building's thermal mass cooler** | The Solar Heat Extractor not only keep the air temperature cooler but also the building's thermal mass, that is the bricks, concrete, tiles and furniture. Thermal mass absorbs the heat, then radiates heat into the building during the night. Keeping the thermal mass cooler reduces this heat from radiating into the space you live and work in. |

## Other products in the Sun Lizard Suite

**Solar Climate Control System**

A completely solar powered heating and cooling system

**Solar Air Shifter**

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

**Solar Heat Collector**

Smart and efficient solar collector for preheating air in existing heating systems or custom solar system

**For local distributors and installers or for more information, contact our head office or please visit our web site: www.sunlizard.com.au**


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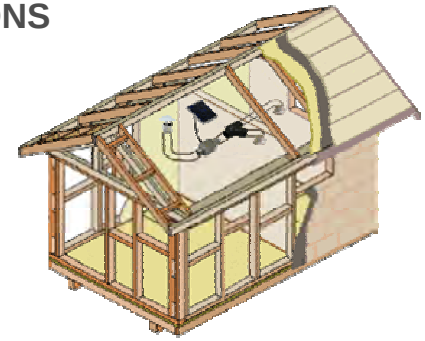
# Sun Lizard
## SOLAR HEAT EXTRACTOR

**BRING YOU THERMAL COMFORT**

Solar Heat Extractor (Standard)

Solar Heat Extractor (NC)

**WITHOUT THE GREEN HOUSE GAS EMISSIONS**



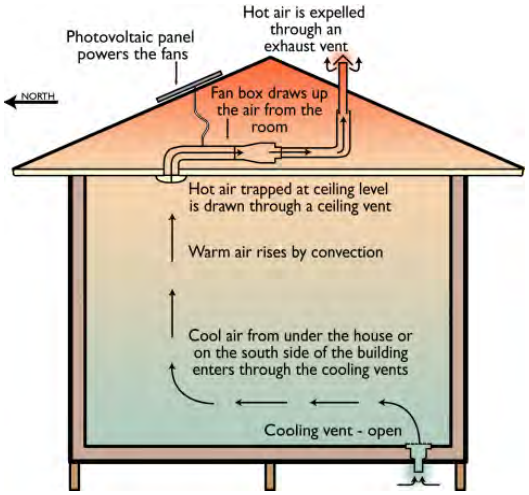
**www.SunLizard.com.au**

*Your Solar Climate Control System*

## Sun Lizard Solar Heat Extractor

The Sun Lizard Solar Heat Extractor is the first totally solar powered heat extractor on the Australian market. It will allow you to reduce the build-up of heat inside your building, keep it ventilated and cooler by up to 10 degrees during summer with no running costs or greenhouse gas emissions.

Offered as a simple and easy to install DIY kit, this system can ventilate up to 2 rooms or spaces (standard kit) at a time.




It also comes with a 240/12 volt plug pack for night time operation. This enables you to install the system without the need for an electrician on to existing buildings or buildings under construction.

### Available Systems

The Sun Lizard Solar Heat Extractor is recommended for an area of up to 100sqm. It is recommended to be installed in the roof cavity, but can also be installed on the roof if there is no roof cavity.

**Heat Extractor (Standard)**

Suitable for building with a roof cavity. Includes ducting for two rooms.

**Heat Extractor (NC)**

Suitable for building with no roof cavity. Includes ducting for one room only.

## How Does the Solar Heat Extractor Work?

The Sun Lizard Solar Heat Extractor provides ventilation and actively removes hot air from your rooms using solar energy. The more sunlight you receive during the hot summer days, the harder the system works to reduce the heat build up in your home.

The system has the following components:

(a) Photovoltaic Panel (PV) - generates electricity for the fans and electronic control system
(b) Fan Box –removes the air from the building.
(c) Ducting
(d) Ceiling Diffusers
(e) Exhaust Flue / Adaptor
(f) Electronic Control System

The system extracts hot air from a room using four solar powered fans inside a fan box. The hot air is released outside either through an exhaust flue (standard Heat Extractor), or an exhaust adapter (Heat Extractor NC – where there is no roof cavity).

The Electronic Control System controls how much air is moving out of the building via a wall switch that can switch the system on/off and high/low.

A mains backup plug pack comes with each system to enable ventilation and heat extraction to continue into hot summer nights when there is no sun light. It can be installed without an electrician provided there is an accessible power point.

### Optional Extras

**Filtered Cooling Vents**

can be purchased as an addition to the system and enables cool air to flow into the building and replace the hot air being expelled. It includes a filter to remove dust, smells and insects. It can be installed in your building through a number of ways, for example;

**Under the floor**

Vents can be installed on the floor to allow cool air from the sub-floor area to pass through into your living and working spaces.

**Cool southern side of building**

If there is a permanently shaded area near the house, these vents can be inserted into the wall down low to the ground to tap this source of cool air.

**Downstairs in multi-story buildings**

Vents can be installed by having a combination of ceiling vents (from downstairs) linking to floor vents (upstairs) to provide extra cooling. This can also be achieved with no modification through an open stairwell.

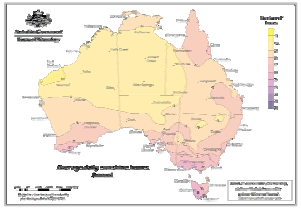
**Underground pipes**

Large bodies of water, such as in water tanks, or simply the ground about 1.5 m beneath the surface, are a good source of constant cool temperatures. Air drawn through pipes that are passed through such cool materials will capture the temperature and deliver it you're your building.

**From a basement**

Vents can be installed on the floor just above the basement area as these areas offer a great source of cool air. You need to be able to get some ventilation into the basement so the cool air can flow out. This will also ventilate your basement, minimizing or even eliminating mould and damp odours.

To find the potential amount of hours of free solar energy, visit the Bureau of Meteorology web site (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 |