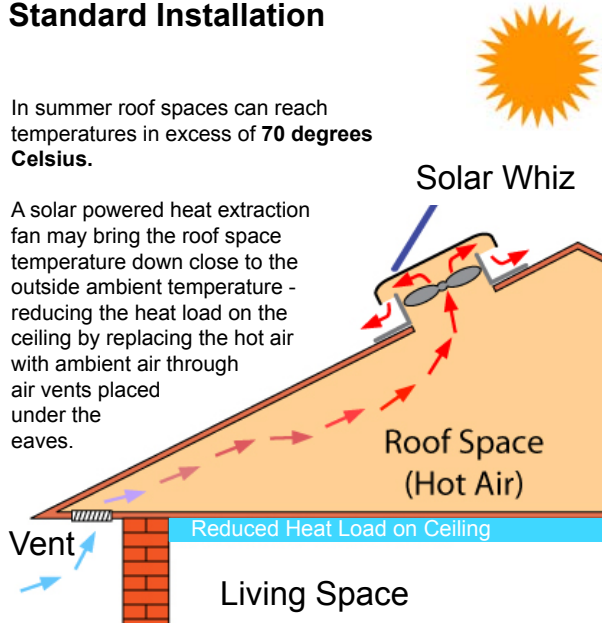


## How does it work?

### Standard Installation

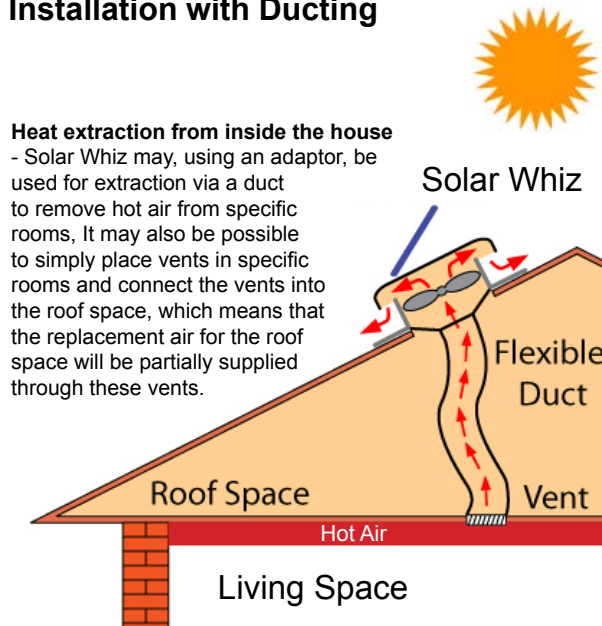
In summer roof spaces can reach temperatures in excess of **70 degrees Celsius**.

A solar powered heat extraction fan may bring the roof space temperature down close to the outside ambient temperature - reducing the heat load on the ceiling by replacing the hot air with ambient air through air vents placed under the eaves.



### Installation with Ducting

**Heat extraction from inside the house** - Solar Whiz may, using an adaptor, be used for extraction via a duct to remove hot air from specific rooms. It may also be possible to simply place vents in specific rooms and connect the vents into the roof space, which means that the replacement air for the roof space will be partially supplied through these vents.



## Why passive/convection systems are not enough

We all know that hot air rises, but it also expands – in all directions. If you have vents in your roof space they will let warm air out. However vents only work when the roof space is already warm – and the expanding air starts radiating into your home. Solar Whiz starts when the sun shines on the roof – and therefore prevents the heat from building up.

### Not just hot air!

Other applications for Solar Whiz:

**Reduce moisture levels:** Solar Whiz is also a very effective way to reduce moisture levels in the roof space. The extraction fan removes moist air, which amongst other damaging effects, may cause condensation on the roof – and in extreme cases condensation dripping onto insulation/ceiling causing damage, such as cracking plaster and peeling paint. A Solar Whiz will also help prevent mould & mildew and protects the roof structure.

**Heat extraction from inside the house:** Solar Whiz may via a duct remove hot air from specific rooms or areas. It may also be possible to simply place vents in specific rooms and connect the vents into the roof space, which means that the replacement air for the roof space will be partially supplied through these vents.

### Where to use Solar Whiz

Solar Whiz can be used across a large number of applications including:

- Homes
- Sheds
- Offices
- Consulting Rooms
- Factories
- Warehouses and storage facilities
- Schools
- Day Care instructions
- Nursing homes
- Stables

Retrofitting is easy, but every new building should include Solar Whiz fan(s) to improve energy efficiency and comfort levels.

### Simple installation

Solar Whiz is powered by a low voltage solar panel and does not require an electrician – or connection to a power point. No wiring means that the Solar Whiz can be installed quickly and effectively on the roof by any handyman.

### What if my roof doesn't face the sun?

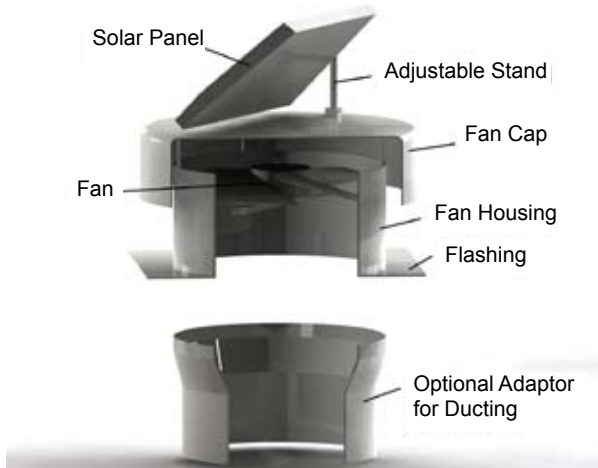
The Solar Whiz can be turned to face the sun no matter which way the roof is facing – so not having a north facing roof is no problem! The adjustable PV panel mounting allows you to choose a suitable angle for any pitch – even if your roof faces south.

Model	SW 1400	SW 2100	SW 1400G
Capacity	1400 m <sup>3</sup> /h	2100 m <sup>3</sup> /h	1400 m <sup>3</sup> /h
PV panel Poly silicon. High-impact resistant panel	10 watt. Adjustable angle 0-90 degrees	20 watt. Adjustable angle 0-90 degrees	10 watt. Adjustable mounting brackets
Fan motor	10-26 volt DC brushless motor with double-shielded ball bearings		
Fan blade	4-wing, polymeric reinforced fan blade designed for high airflow and low noise – 300 mm diameter		
Fan cap	Aluminium alloy for maximum durability	N/A	
Body	Corrosion resistant Steel (superior corrosion resistance suitable for coastal installations)	N/A	
Flashing	Aluminium - 560 x 560 x 0.8mm	N/A	
Coating	Electro Static UV resistant spray cured in high temperature drying process		
Hardware	Cold sheet steel brackets, stainless steel fasteners and screen		
Dimensions	560 x 560 x 380mm	560 x 560 x 380mm	360 x 545 x 30mm
Packing size and weight	580 x 580 x 400mm, 10Kg	580 x 580 x 400mm, 12Kg	400 x 600x 60mm, 7Kg
Colours	Steel, grey or black powder coated		
Options	Thermostatic control: Fixed temperature – 30°C or adjustable 10-30 degrees		
	Remote mounting bracket for PV.		
	250 mm duct connection to allow extraction directly from one or more rooms.		

The whisper quiet Solar Whiz is designed and manufactured for GES according to industry standards by an experienced motor and fan manufacturer with ISO 9001 accreditation to suit Australian Conditions.

It reduces the heat load on your ceiling by removing hot air from your roof space. You may also via ducting connect the Solar Whiz directly to one or more rooms to extract the hot air directly from there – or you may use ceiling vents to allow the Solar Whiz to extract hot air.

## Fan Construction and Components



## Benefits

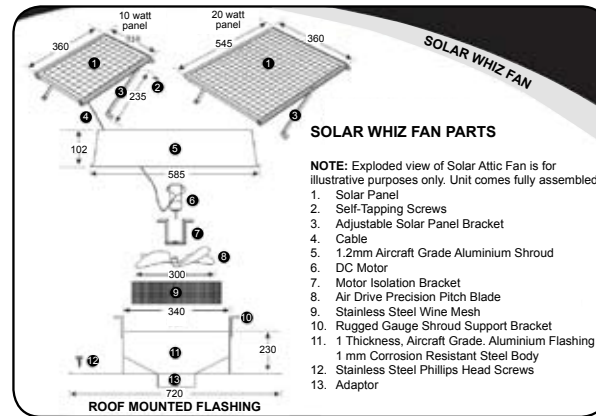
- Cools your house
- Reduces build up of heat in roof space
- Lowers the need for air conditioning
- No running cost
- No carbon emissions
- Operates when required (i.e. when the sun is shining)
- Quiet operation
- Simple installation
- Safe low voltage installation
- No electrician required
- Optional thermostat – ensuring Solar Whiz only cools when roof space is warm
- Reduction of moisture levels in roof space
- Protects against moisture damage to roof structure



Solar Whiz is designed for durability in Australian conditions and is backed up by a substantial warranty.

## Warranty

- 10 year warranty on PV panel
- 20,000 hours warranty on fan motor
- 10 years warranty on all other components



## Inquiries & Orders:

Global Eco & Environmental Solutions

Ph: 1300 655 118

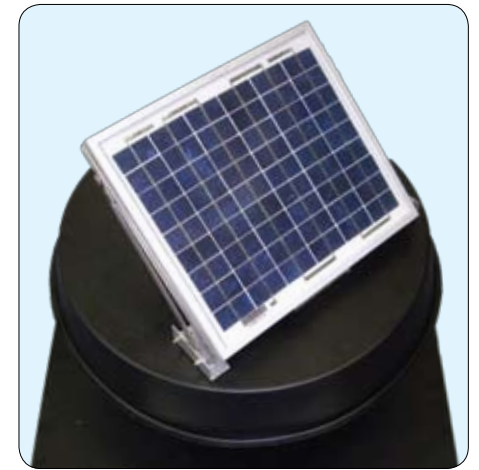
Email: [ges@ges.com.au](mailto:ges@ges.com.au)

Website: [www.ges.com.au](http://www.ges.com.au)

Or your local dealer:

Delivery available Australia wide.

Disclaimer: Global Eco & Environmental Solutions does not accept any responsibility for events that result from the use of this product or the information provided in this brochure.



Is your home or office too hot?

Or are you spending a fortune on air conditioning?

**Your roof space may be the reason!**

The Solar Whiz is a new Solar Powered Heat Extraction Fan, which could save you many hundred dollars every year, by reducing the temperature in your roof space thereby reducing the heat load on the whole building.

Roof temperatures throughout most of Australia often reach 60°C – 70°C in the summer months. These high temperatures will - even with good insulation - eventually radiate heat down through the ceiling and increase the internal temperature.

The Solar Whiz cools your roof space by replacing the hot air with cooler air pulled in through vents under the eaves or other openings to the roof space. This normally enables you to maintain roof temperatures only a few degrees above the ambient temperature.