



## Installation

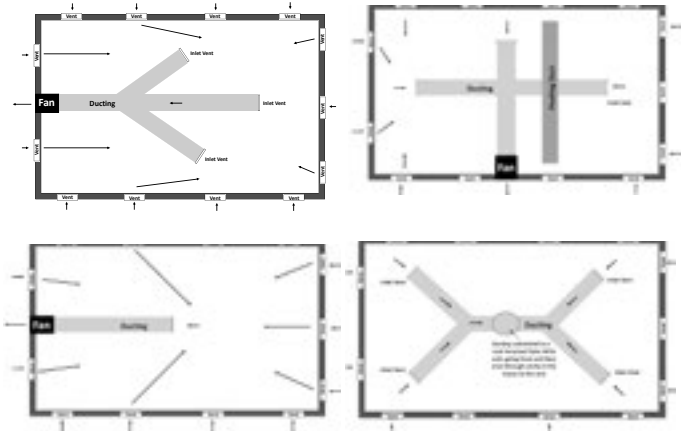
GES's range of solar powered subfloor fans are flexible and suitable for a range of applications and ideal for DIY activities with all wiring and fitting instructions available.

Alternatively you may contact your local dealer to organise a quote, inspection or installation.

Below are a few examples of how GES's solar fans may be installed to accommodate standard scenarios requiring sub floor ventilation.

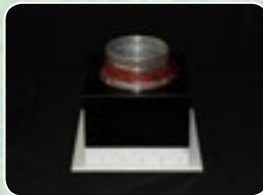


## Subfloor Ventilation System Ducting Options

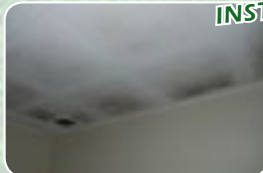


Benefits of our systems:

- Unlike powered, timer operated fans our solar powered fan systems run when the sun is out and therefore generally deliver fresh and dry air optimising the effect of your subfloor ventilation.
- The solar powered operation ensures optimum timing, fan speed as well as quiet operation without power consumption.
- Besides protecting the structural integrity of your house; effective sub floor ventilation will normally also result in improved air quality inside the house and reduce the risk of developing asthma symptoms and respiratory problems. Effective sub floor ventilation therefore help you look after the health of your family as well as that of your house.



SIMPLE  
INSTALLATION



Mould on ceiling as a result of poor ventilation.

**Call us: 1300 655 118**

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



**Global Eco & Environmental Solutions**

Visit our showroom at:

**1135 Toorak Rd, Camberwell, VIC 3124**

Or contact your local dealer:



## Warranty

GES's subfloor fans are designed and developed based on many years experience with various other solar ventilation systems. We offer a 10 year warranty on PV panels and a 2 year warranty on all other components. Extended warranty is available upon request. An extended warranty is also available on request.



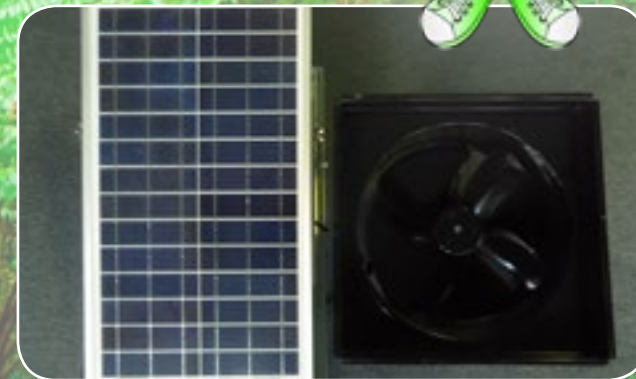
## Delivery available Australia wide

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.

# SolarWhiz

Sustainable Ventilation

## Solar Subfloor Ventilation



Is your subfloor damp?  
Does your house smell musty?  
Is there condensation throughout the house?  
Do you have problems with mould, mustiness or rotting floor boards?

**Make these problems a thing of the past!**  
**Our Solar powered Subfloor Ventilation system may be the solution you are looking for!**

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

## Importance of subfloor ventilation

Effective ventilation of the subfloor area is essential to the health and longevity of any building with a subfloor area as well as its occupants. Permanent high moisture levels may cause irreversible damage to the structure of the house. A damp subfloor will normally also be reflected by high humidity levels inside the house resulting in poor indoor air quality.

Look out for symptoms inside the house such as condensation on windows, mustiness, mould and mildew, which normally are strong indicators of high humidity levels in your home – and often caused by damp subfloors.

These symptoms are not only unsightly but also pose respiratory health risks such as asthma and allergies and may also cause skin irritations.

## Damage caused by poor ventilation in subfloor areas

Damp subfloors are the result of high humidity levels under houses. Mould and other fungi thrive in damp environments, and may result in rotting stumps and floor boards as well as cause odours and musty smells throughout the house.

Dampness creates ideal breeding grounds for termites, white ants and wood borers. Which is likely to cause major damage in the subfloor areas. A damp subfloor may also cause rising damp resulting in serious damage to painted surfaces and internal walls.

## Subfloor ventilation - How & Why

Ideally every house with a subfloor area would have effective cross flow ventilation under the house.

Some of the main reasons for lack of ventilation include:

- Heating ducts blocking air flow
- Few or no vents
- Small or blocked vents
- Having vents only on one side of the subfloor area

Fan assisted ventilation and ducting may alleviate these situations, however, it is important to address fundamental issues. For optimum results locating fans and inlets to achieve cross-ventilation is of utmost importance.

It is most effective to run fans during the day as the replacement for the air removed will be warmer and drier. Operating sub floor ventilation systems during wet weather will normally increase the moisture levels - not reduce them!

Should you wish to operate your fan/s on a timer or at night, GES offers 12 volt power supplies and day/night packs which can be powered via a regular 240V power point.

## Prevention of subfloor issues

Global Eco & Environmental Solutions (GES) has over the past several years successfully solved many customers severe damp problems with a unique approach that involves using one, multiple, or a combination of products that it has to offer.

## Solar Whiz

The Solar Whiz gable fan is due to its unique design extremely effective for extracting air from the subfloor and may, depending on the situation, be used with or without ducting for addressing damp issues and bringing fresh replacement air into the affected subfloor area.

## Solar Air Module (SAM)

A SAM system may be installed to address problems in particularly difficult/wet areas by supplying warm dry air into problem areas, which will raise the evaporation rate and increase the drying effect. A second fan will then be installed on the opposite side of the building to ensure the moisture is removed.

## Inline Fans

When there is less than 500 mm clearance for mounting the fans, GES offers a range of medium and high volume solar powered fans. These are available in 8, 16 (150mm) or 25 Watts (330mm); offering space effective options for subfloor ventilation.



## Roof Mounted Solar Whiz

If the subfloor area isn't accessible, a simple but effective way to ventilate the subfloor area is to mount a Solar Whiz on the roof (or in the gable) - and draw moist air out from the subfloor via a duct.



## Specifications

| Model  | SF1400G   | SF2100G   | SF3000G   | SF1200  | SF1900  | SF490   | SF350   | SAM1112   | SAM1111   |
|--|---|---|---|---|---|---|---|---|---|
| Max. Airflow Capacity at 0 press.              | 1400 m <sup>3</sup> /h (w/o cover)  | 2100 m <sup>3</sup> /h (w/o cover)  | 3000 m <sup>3</sup> /h (w/o cover)  | 1200m <sup>3</sup> /h (w/o cover)   | 1900m <sup>3</sup> /h w/louvre vent   | 490m <sup>3</sup> /h w/louvre vent  | 350m <sup>3</sup> /h w/louvre vent  | 490m <sup>3</sup> /h (w/o cover)  | 350m <sup>3</sup> /h (w/o cover)  |
| PV Panel Polycrystalline High Impact Resistant | 10Watt. Adjustable Tilt frame   | 20Watt. Adjustable Tilt frame   | 25Watt. Adjustable Tilt frame   | 25Watt. Solid and supplied separately   | 25 Watt. Solid and supplied separately  | 16Watt. Solid and supplied separately   | 8 Watt. Solid and supplied separately   | 16Watt. Solid and supplied separately   | 8Watt. Solid and supplied separately  |
| Fan Motor                                      | 6-14 volt DC brushless motor with double shielded ball bearings   | 6-14 volt DC brushless motor with double shielded ball bearings   | 6-1.8 volt DC brushless digital design motor with double shielded ball bearings   | 6-1.8 volt DC brushless digital design motor with double shielded ball bearings   | 6-1.8 volt DC brushless digital design motor with double shielded ball bearings   | 6-1.8 volt DC brushless digital design motor with double shielded ball bearings                       | 6-1.8 volt DC brushless digital design motor with double shielded ball bearings                       | 6-1.8 volt DC brushless digital design motor with double shielded ball bearings                       | 6-1.8 volt DC brushless digital design motor with double shielded ball bearings                       |
| Speed (12 volt)                                | 900rpm  | 1150rpm   | 1300rpm   | 1300rpm   | 1300rpm   | 2350rpm   | 1680rpm   | 2350rpm   | 1680rpm   |
| Fan Blade                                      | Balanced 4-wing design, ABS polymeric reinforced fan blade with UV protection. Designed for high airflow and low noise- 300mm diameter.   | Balanced 4-wing design, ABS polymeric reinforced fan blade with UV protection. Designed for high airflow and low noise- 300mm diameter. | Balanced 4-wing design, ABS polymeric reinforced fan blade with UV protection. Designed for high airflow and low noise- 300mm diameter. | Balanced 4-wing design, ABS polymeric reinforced fan blade with UV protection. Designed for high airflow and low noise- 300mm diameter. | Balanced 4-wing design, ABS polymeric reinforced fan blade with UV protection. Designed for high airflow and low noise- 300mm diameter. | Balanced 3-winged design. Light aluminium providing low mechanical resistance and maximising airflow. | Balanced 3-winged design. Light aluminium providing low mechanical resistance and maximising airflow. | Balanced 3-winged design. Light aluminium providing low mechanical resistance and maximising airflow. | Balanced 3-winged design. Light aluminium providing low mechanical resistance and maximising airflow. |
| Body   | Aircraft grade aluminium  | Aircraft grade aluminium  | Hot galvanised steel  | Hot galvanised steel  | Hot galvanised steel  | Cold sheet steel rackets, stainless steel fasteners   | Cold sheet steel rackets, stainless steel fasteners   | Cold sheet steel rackets, stainless steel fasteners   | Cold sheet steel rackets, stainless steel fasteners   |
| Paint  | Black electrostatic UV resistant spray cured in high temperature drying process.  | Black electrostatic UV resistant spray cured in high temperature drying process.  | Black electrostatic UV resistant spray cured in high temperature drying process.  | Black electrostatic UV resistant spray cured in high temperature drying process.  | Black electrostatic UV resistant spray cured in high temperature drying process.  | Black electrostatic UV resistant spray cured in high temperature drying process.                      | Black electrostatic UV resistant spray cured in high temperature drying process.                      | Black electrostatic UV resistant spray cured in high temperature drying process.                      | Black electrostatic UV resistant spray cured in high temperature drying process.                      |
| Materials                                      | Cold sheet steel rackets, stainless steel fasteners   | Cold sheet steel rackets, stainless steel fasteners   | Hot galvanised steel  | Hot galvanised steel  | Hot galvanised steel  | Cold sheet steel rackets, stainless steel fasteners   | Cold sheet steel rackets, stainless steel fasteners   | Cold sheet steel rackets, stainless steel fasteners   | Cold sheet steel rackets, stainless steel fasteners   |
| Dimensions (mm)                                | ø: 500<br>Depth: 185  | ø: 500<br>Depth: 185  | ø: 500<br>Depth: 185  | ø: 330<br>Depth: 335<br>ø Flange: 300   | ø: 350x350<br>Depth: 215<br>ø Flange: 330   | ø: 237x247<br>Depth: 165<br>ø Flange: 150   | ø: 237x247<br>Depth: 165<br>ø Flange: 150   | ø: 500<br>Depth: 180<br>ø Flange: 150   | ø: 500<br>Depth: 180<br>ø Flange: 150   |
| Packing Size (mm) & Weight                     | 530x530x270<br>7KG  | 630x630x230<br>8KG  | 650x650x230<br>9KG  | 340x340x360<br>4KG  | 430x430x250<br>5KG  | 330x330x250<br>2.5KG  | 330x330x250<br>2.5KG  | 200x190x190<br>1KG  | 200x190x190<br>1KG  |
| Noise Level                                    | <40dBA  | <45dBA  | <45dBA  | <45dBA  | <45dBA  | <56dBA  | <43dBA  | <56dBA  | <43dBA  |
| Colour   | Black Powder Coating  |   |   |   |   |   |   |   |   |
| Solar Air Collectors                           | For more information and technical specifications on our Solar Air Module (SAM) Units for heating or sub-floor ventilation, please refer to our SAM brochure, visit <a href="http://www.heatwithsolar.com.au">www.heatwithsolar.com.au</a> , or call 1300 655 118 |   |   |   |   |   |   |   |   |

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