

Manufacturers Statement - Solar Star Performance

The Solar Star roof vent is an eco-friendly and cost effective way to help Australian homeowners save on their monthly utility bills. It is well documented that a poorly ventilated roof space can increase heating and cooling costs, contribute to problems with dangerous mould and accelerate the deterioration of critical roof. It is commonly accepted that temperatures inside a roof space with inadequate ventilation can reach as high as 60 degrees Celsius. Heat trapped in the roof space acts like a heat sink which causes the heat to radiate into the living space below causing air conditioning units to work even harder. Solatube Australia has developed its Solar Star roof ventilation range with consideration to the following points that are generally accepted as the points you need to consider when you decide to cool your home using roof ventilation products.

- Learn how air flows naturally through your home.
- Obtain a minimum of 5 air-exchanges per hour from your roof space.
- Consider the use of a ceiling vent in rooms to assist with the airflow throughout your home.

Solatube Australia encourages you to make sure you achieve the minimum air exchange within your roof space. If you do not achieve adequate air exchange through the roof ventilation system that you choose; then you risk losing your investment.

How many do I need? (Manufacturers Residential Quantity Guidelines)

Residential Quantity Guidelines



Roof zone size (m ²)	Roof Pitch (up to 18°)	Roof Pitch (19-34°)	Roof Pitch (36-45°)
74	1 x 1200	1 x 1200	1 x 1600
111.5	1 x 1200	1 x 1600	1 x 1600
149	2 x 1200 or 1 x 1600	1 x 1600	2 x 1600
186	1 x 1600	2 x 1600	2 x 1600
223	2 x 1600	2 x 1600	3 x 1600

Recommended air intake venting (eaves or soffits) size requirements:
 ▶ Roof space area (square metre)/0.29 = Square centimeters of inlet vent area



<p>Typical 279m² house divided into roof space zones with Solar Star recommendations.</p>	<p>Typical 111.5m² house.</p>
<p>Zone 1: 56m² Roof Pitch: 34° Suggested Option: 1 x RM 1200</p>	<p>Zone 2: 223m² Roof Pitch: 34° Suggested Option: 2 x RM 1600</p>
<p>Single zone: 111.5m² Roof Pitch: 18° Suggested Option: 1 x RM 1200</p>	



RM 1200



RM1600

On a relatively calm, sunny day, Solar Star removes hot, humid air from roof spaces. The RM1200 model at an exhaust rate equivalent to about 10 domestic wind turbines and the RM1600 model at an exhaust rate equivalent to about 15 domestic wind turbines. When tested according to Australian standard 4740:2000, the Solar Star RM1200 model recorded a flow rate of 1080m³ / hour and the RM1600 model recorded a flow rate of 1800m³ / hour at zero stack height.

When tested to the same Australian Standard a popular “off the shelf” Wind Turbine Ventilator recorded a flow rate of 90m³ / hour (based on 8km / hour wind speed). The exhaust rate of all vents should only be compared under the conditions of the Australian Standards.

Product Approvals

- ▶ RM 1200 Low & High Profile meets Florida Building Code (FL 10884) and Texas Department of Insurance (RV-57)
- ▶ RM 1200 High Profile configuration available to meet Florida Building Code HVHZ (FL 14826)