A breath of fresh air… and comfort year-round!

The Ampelair range of ventilators has types and sizes to suit new installations or replacements. Aluminium construction. Throat sizes from 150 mm to 950 mm.

- Wind driven
- No running costs
- Reliable
- 15 year warranty
  - details from Ampelite offices
Ampelair SV Industrial Ventilators combine appearance and performance – the simple answer on any roof

Wind driven turbo ventilators are used worldwide because of their low capital and installed cost, adaptability, high capacity per vent, and reliability.

Operation is simplicity in itself. As the vent hood is rotated by the wind the stale inside air is exhausted through the vanes and the natural inward flow of air is boosted. Ampelair Rotary Ventilators are efficient, impressive, and reliable.

Calculations to decide size and number of Ventilators.

1. Determine the volume of the building.
Volume of section A = 0.5 x L x W x Ha
Volume of section B = L x W x Hb
Total building volume = volume of section A + volume of section B.

Note: For factories, the combined volume A + B should be used.
Where Volume B is air-conditioned, only Volume A is used to calculate the number of ventilators required. No air should be drawn from the air-conditioned space below ceiling level.

2. Select the number of ventilators required

\[
\text{METRIC} = V \times \frac{Ac}{Hr} \\
\times 3.6
\]

Where:

\[
V = \text{Volume of building or roof space} \\
Ac/Hr = \text{Air changes per hour} \\
\text{EX}/c = \text{Exhaust capacity of ventilator}
\]

Using ventilators in the ceiling space of air-conditioned buildings reduces the load on the air-conditioning plant and helps reduce power consumption accordingly.

Every industrial building, large or small, needs to keep air circulating and keep temperatures to a comfortable level.

Ampelair ventilators are an effective, inexpensive, reliable, maintenance free ventilation solution. Using only the power of the wind they extract stale air and allow fresh air to circulate within the building.

Applications of Ampelair aluminium ventilators include:

- Exhausting pit gases, methane, sulphur dioxide etc.
- Minimising condensation under metal roofs covering water storage tanks or reservoirs.
- Removing chlorine fumes above enclosed swimming pools.
- Ventilating very gritty environments where air-borne particles may clog an exposed bottom bearing.
- Industrial ventilation when higher standards matter.

Features

- Stainless Steel bearings fully enclosed and self lubricating in a Stainless Steel double row casing.
- Bearings are maintenance free, designed to withstand extreme environments.
- Bearing assembly provides low friction with minimal drag, resulting in a longer life.
- Two part shaft system comprising anti corrosive steel axle fully sealed in a fire resistant nylon casing.
- The tough nylon casing ensures the original alignment of head and axle is always maintained, even after wind pressure stress.
- The straight vanes are free flowing.
- Optimum efficiency has been achieved through the vane’s angle and maximum available surface area.
- Low profile design and straight vanes provide pleasing aesthetics.
- Also available in powder coated colour finish.
- Available models:
  - SV150, SV300, SV450, SV600, SV800, SV950.

Ventilators can be supplied complete with base to suit the application, or heads and bases (square to round or variable pitch) may be ordered separately. Site surveys are available or you can use the following formulas to determine your requirements.
Ampelair ventilators can be supplied complete with a base to suit any application, or heads and bases can be ordered separately. Roof pitch and roofing profile must be specified at time of ordering bases. Heavy duty bases are made from Zincalume®, and supplied in natural finish, but Colorbond® colours can be supplied if specified.

**Square to Round - Zincalume®**
For models: SV150, SV300, SV450, SV600, SV800, SV950.

**Variable Pitch - Aluminium** Available for models: SV300, SV450, SV600

**Dampers**
Available ex stock for 300 mm, 450 mm, and 600 mm throat diameter ventilators. Smaller sizes are not widely used but can be supplied against orders.
Manually operated. Zincalume® construction.

**FIFTEEN YEAR WARRANTY**
Details of the Ampelair warranty are available from Ampelite Australia Pty Ltd offices. Specific written project warranties will be provided upon verification of correct installation procedures.
### CAPACITY TABLE

Extraction volume expressed in cubic metres per second. 1 cubic metre = 1000 litres

<table>
<thead>
<tr>
<th>Stack Height</th>
<th>Wind Speed</th>
<th>Temp Diff.</th>
<th>Model SV Industrial Ventilators</th>
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The formulas on page two and the above capacity table are useful guides in determining the model size and number of ventilators required.

Building usage, and other factors, finally determine the exact requirements for maximum efficiency and the comfort levels required. Ampelite can assist at design or specification stages in this regard.

### Definitions

**Stack Height**

This is a measurement taken from the intake area (generally floor level) to the base of the ventilator.

**Wind Speed**

Average or usual wind speed (Km/hr) at the location.

**Temperature Differential**

The average difference between internal and external temperatures.

### INSTALLATION

1. It is recommended for rotary sizes 600 and up, solid support between purlins is installed. Failure to do so can result in needless movement of the vent in high winds. Failure to provide correct support will result in loss of warranty.

2. It is recommended back trays to ridge capping or roof expansion joints are used to provide guaranteed leak proof installation. Photo below shows back tray extending beneath roof expansion joint.

3. Drawing below shows soaker installation without a back tray.

4. Refer to SAA HB39 Installation Code for Metal Roofing and Wall Cladding and install accordingly.

### SPECIFICATION

The Wind Driven Ventilators shall be “Ampelite” SV Industrial

- in natural finish/coloured to match Colorbond®

Installation shall be in accordance with Ampelair fixing instructions and closely follow SAA HB39 installation procedures. All work shall be done in a workmanlike manner.

*Select/insert finish required.