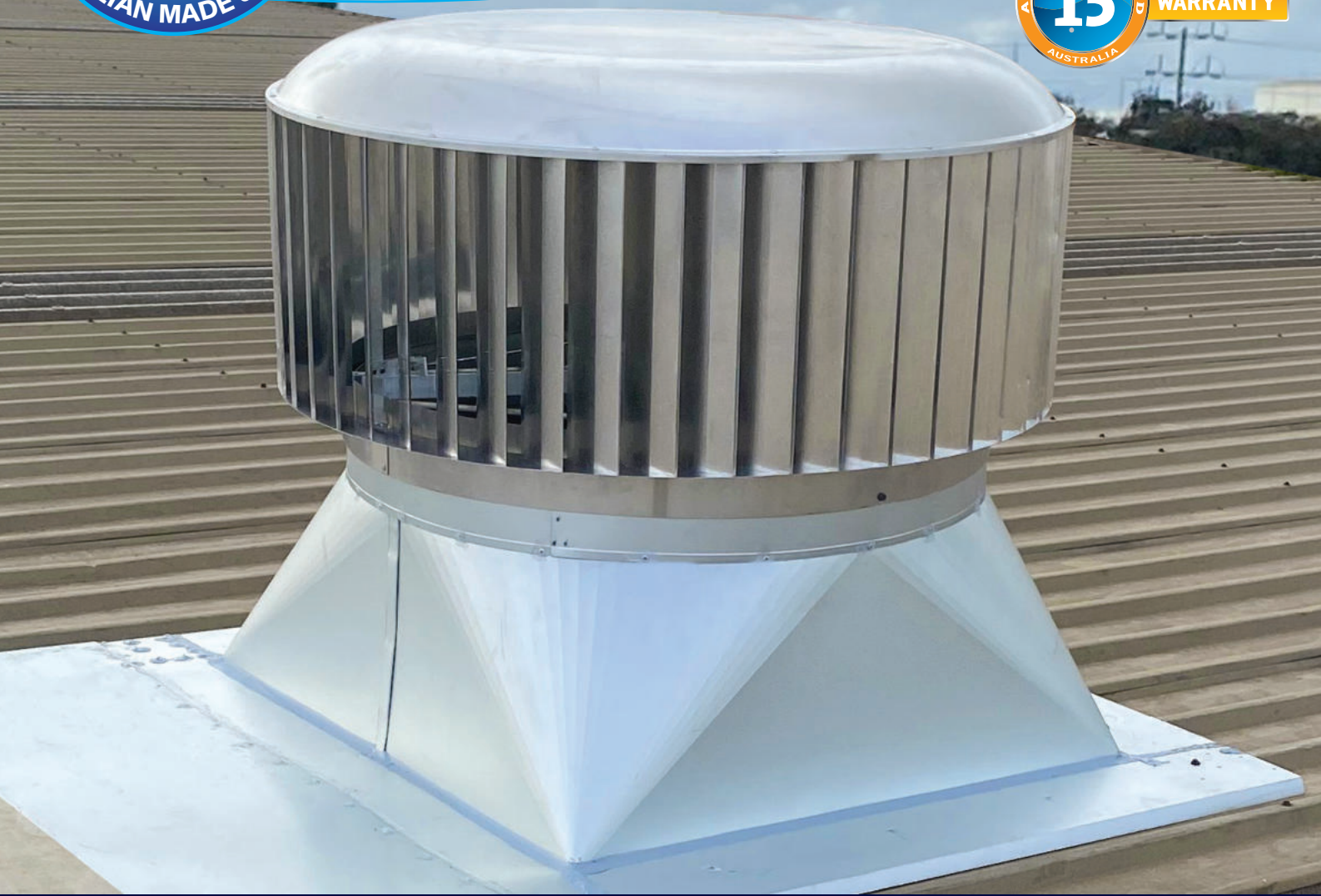




# Ampelair

**AMPELITE**  
Australian owned



## Ampelair SV Industrial – Ventilators

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

The Ampelair range of ventilators has a type and size to suit all installations.

Aluminium construction. Throat sizes from 150mm to 950mm.



**KEEP COOLER  
IN SUMMER**



**REDUCE  
GREENHOUSE GASES**



**RELIABLE**



**NO RUNNING  
COSTS**



**ENJOY YEAR  
ROUND COMFORT**

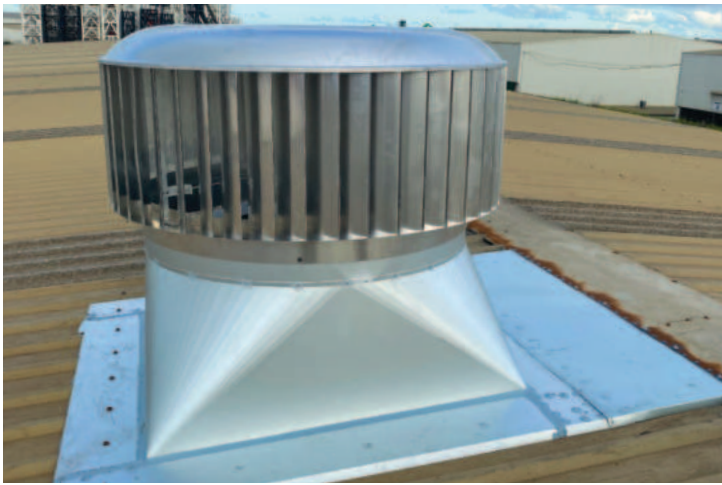


**WIND  
DRIVEN**





## Ampelair SV Industrial Ventilators combine appearance and performance – the simple answer on any roof.



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.
- Australian Owned, Australian Manufactured.

Wind driven turbo ventilators are used the world over 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.

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.

### Calculations to decide size and number of Ventilators.

#### 1. Determine the volume of the building.

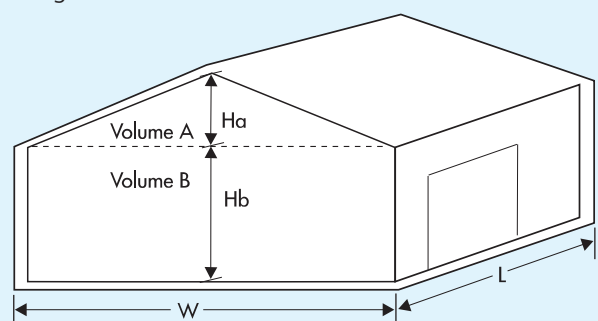
Volume of section A =  $0.5 \times L \times W \times H_a$

Volume of section B =  $L \times W \times H_b$

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

$$\text{METRIC} = V \times \text{Ac}/\text{Hr}$$

$$\text{EX}/c \times 3.6$$

Where:

V = Volume of building or roof space

Ac/Hr = Air changes per hour

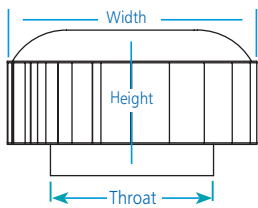
EX/c = Exhaust capacity of ventilator

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

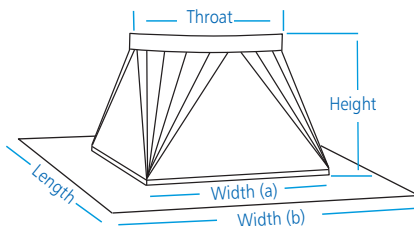
# Dimensions

## VENTILATOR HEAD

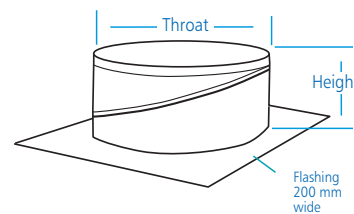
All models and bases



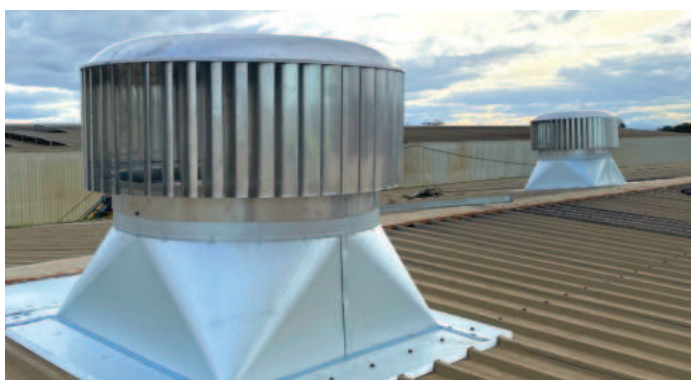
## SQUARE to ROUND BASE



## VARIABLE PITCH BASE



Aluminium	Throat	Width	Height	SQ to RND Dimensions		Base Dimensions		Width	Height	Roof Pitch
				Width (a)	Height	Width (b)	Length			
SV150	150mm	340mm	290mm	210mm	210mm	-	-	-	-	1-40° max
SV300	300mm	480mm	380mm	500mm	400mm	630mm	850mm	495mm	190mm	1-40° max
SV450	450mm	625mm	405mm	600mm	400mm	800mm	1000mm	740 x 640mm	280mm	1-30° max
SV600	600mm	770mm	450mm	700mm	400mm	800mm	1200mm	900mm	280mm	1-22.5° max
SV800	800mm	985mm	535mm	900mm	500mm	990mm	1200mm	-	-	1-22.5° max
SV950	950mm	1130mm	575mm	1000mm	550mm	1310mm	1510mm	-	-	1-22.5° max



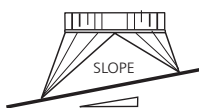
## Bases

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 Zinalume®, and supplied in natural finish, but Colorbond® colours can be supplied if specified.

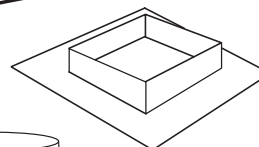
### Square to Round – Zinalume®

For models: SV150, SV300, SV450, SV600, SV800, SV950.

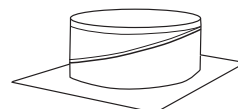
**Variable Pitch – Aluminium** Available for models: SV300, SV450, SV600



The most widely used base type. Roof pitch must be specified when ordering.



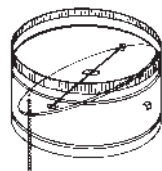
Square to round bases are supplied with roof tray which must be installed according to Ampelair fixing instructions overleaf.



Variable pitch aluminium base and flashing.

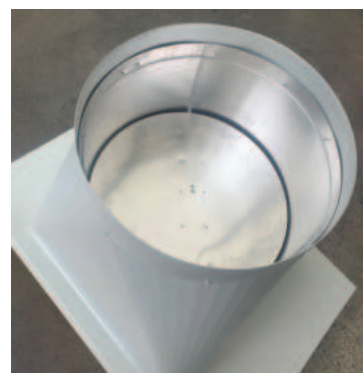
**Note:** Base flashings are powder coated to avoid dissimilar metal contact.

## Dampers



Available in both ELECTRIC and MANUAL dampers. Square to round base ONLY. Ampelair's single disc butterfly dampers come in a range of sizes to allow flexible control of air movement. Sizes from 300mm, 450mm, 600mm, 800mm & 950mm.

**Note:** Electric dampers must be fitted by a qualified electrician



### Building Type

### Recommended Air Changes per Hour

Warehouses	4 to 8
Factories & Workshops	5 to 10
Gyms, Tennis & Squash Courts	7 to 10
Assembly Halls, Garages	10 to 15
Toilets	12 to 15
Laundries	20 to 40
Stables, Piggeries & Poultry	20 to 50
Bakeries, Boiler Houses	30 to 40


# Capacity Table

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

Stack Height Metres	Wind Speed Km/hr	Temp Diff. °C	Model SV Industrial Ventilators					
			150	300	450	600	800	950
3.0	6	6	0.038	0.152	0.350	0.609	1.162	1.617
		12	0.039	0.158	0.362	0.630	1.202	1.672
		18	0.042	0.166	0.382	0.664	1.267	1.762
	8	6	0.045	0.182	0.419	0.727	1.388	1.931
		12	0.046	0.184	0.428	0.738	1.408	1.959
		18	0.049	0.193	0.452	0.785	1.498	2.085
	12	6	0.068	0.272	0.625	1.088	2.075	2.887
		12	0.069	0.277	0.635	1.105	2.109	2.935
		18	0.070	0.279	0.641	1.116	2.125	2.963
	16	6	0.084	0.336	0.772	1.343	2.561	3.562
		12	0.086	0.344	0.791	1.377	2.627	3.655
		18	0.088	0.352	0.808	1.408	2.683	3.741
6.0	6	6	0.039	0.158	0.362	0.630	1.202	1.672
		12	0.046	0.183	0.420	0.732	1.397	1.944
		18	0.047	0.189	0.431	0.751	1.433	1.994
	8	6	0.046	0.184	0.424	0.738	1.408	1.959
		12	0.048	0.191	0.439	0.763	1.456	2.026
		18	0.050	0.199	0.458	0.797	1.521	2.117
	12	6	0.069	0.277	0.635	1.105	2.109	2.935
		12	0.071	0.285	0.655	1.141	2.177	3.029
		18	0.072	0.310	0.713	1.239	2.364	3.289
	16	6	0.086	0.344	0.791	1.377	2.627	3.655
		12	0.089	0.354	0.813	1.414	2.697	3.753
		18	0.092	0.367	0.844	1.467	2.799	3.895
9.0	6	6	0.042	0.166	0.381	0.664	1.267	1.762
		12	0.047	0.180	0.431	0.751	1.433	1.994
		18	0.052	0.210	0.483	0.839	1.601	2.227
	8	6	0.049	0.196	0.452	0.785	1.498	2.085
		12	0.050	0.209	0.458	0.797	1.521	2.117
		18	0.058	0.230	0.530	0.922	1.759	2.447
	12	6	0.070	0.279	0.642	1.116	2.129	2.963
		12	0.077	0.300	0.712	1.239	2.364	3.289
		18	0.080	0.321	0.737	1.283	2.449	3.407
	16	6	0.088	0.352	0.808	1.408	2.683	3.741
		12	0.092	0.367	0.843	1.467	2.799	3.895
		18	0.093	0.371	0.855	1.486	2.836	3.946

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.



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.

Ampelite is proudly Australian owned and manufactured. Profits remain in Australia and taxes paid benefit our community.

# 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.

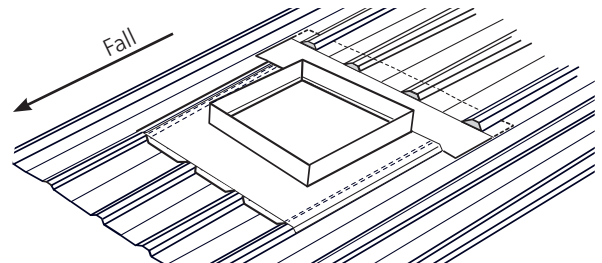
# Installation

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 "Ampelair" SV Industrial ..... (insert size) made from Aluminium

\* 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.

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