

**When efficient, large
space heating is needed**

AVON
ELECTRIC Ltd.

SUPERFAN HEATERS

FOR EVERY SITUATION



**A safe, low cost, multifunction
heating system for large areas**



SUPERFAN HEATERS

Designed in New Zealand, the Avon Superfan Heater solves heating problems in larger buildings and provides a warm comfortable environment. These heaters are ideal for installations with low insulation values, or are used for short, intermittent occupancy.

Air Curtain or Space Heaters

Dual Function Avon Superfan Heaters deliver huge volumes of "heat on demand" at a very low capital COST per KILOWATT.

Electricity is 100% efficient and environmentally friendly. When connected to Off Peak electricity tariffs, Avon Superfan Heaters are the perfect answer for complete or supplementary heating of:

Community centres	Schools	Hospitals
Factories	Entrance Doors	Churches
Garages	Warehouses	Supermarkets
Gymnasiums	Hotels	Club rooms
Offices	Retail shops	Department stores
Banks	Restaurants	Halls etc.....

Avon Superfan Heaters produce only the exact amount of heat required. An integral part of the heater, a multi-stage thermostat automatically selects the correct kilowatt capacity and fan speed relative to the needs of the area.

Increased pedestrian traffic through entrances	Capacity increases
A cold weather change	Capacity increases
Loading out through loading bay doors	Capacity Increases
A major increase in people occupancy (Theatres etc.)	Capacity decreases
Large heat output from lights, people, machinery etc.	Capacity decreases
Availability of supplementary heating i.e. boilers, electric storage systems	Capacity decreases

Avon Superfan Heaters "size themselves" to your exact heat requirements.

Avon Superfan Heaters eliminate:

- Ducting or water pipe heat losses, leaks or maintenance.
- Flues and chimneys, which rust, waste, require maintenance, or create a fire or pollution hazard
- The use of floor space, inside or out.
- Access to public, avoids danger to children, vandalism and interference.
- Annual insurance inspections.

Through continual research and development, concentration on safety, performance, reliability and simplicity the Avon Superfan range has been expanded to meet requirements unique to the Australian and New Zealand markets.

Unique Heat Recovery System

Installed high on walls, all Superfan models are designed to recover waste, overhead heat from people, lights and machinery, before it escapes.

This waste, overhead, heat then becomes an **effective heat source**, as it passes through the Superfan heater it is returned to floor level to provide heat **where it is needed**.

In rooms with high occupancy levels such as boils, meeting places etc, the recovery of waste heat can reduce operating costs by 30% or more.

Six Basic Models

Six basic models are offered together with a design/build service for any special need, i.e. controls, heat stages, fan speeds, noise levels, fresh air/recirculation dampers, air inlet "heat siphon" etc. to suit any requirement.

Three Cabinet Styles

Standard Model - ST

These are the tallest cabinets in the Avon range. They are designed for buildings with a high ceiling where the largest dimension between the top air inlet and bottom air outlet is desirable. This allows the heater to recover high level waste heat through an efficient air filtering system and then quietly deliver reheated air where it is required - to floor level.

Ideal for gymnasiums, larger shops and department stores, halls, churches, shopping malls, factories, banks, offices. Used as a space heater or a heated air curtain, the powerful warm air stream welcomes customers through open doors without cold droughts.



Utility Model - STU

This basic low cost model has all the features of the standard models except noise control and a painted cabinet. Finished in plain galvanised iron for industrial use at a budget price. Noise levels average 3 - 4 D.B.A higher than standard (ST) models.

Slimline Model - SL

The Slimline model is designed for those locations with insufficient wall space for the standard model. Perfect for positioning above a doorway to provide a warm air curtain. The 1000mm wide cabinet is sufficient for most doorways.

If Standard or Slimline models are dimensionally unsuitable, other product data is available. Enquire from your supplier.



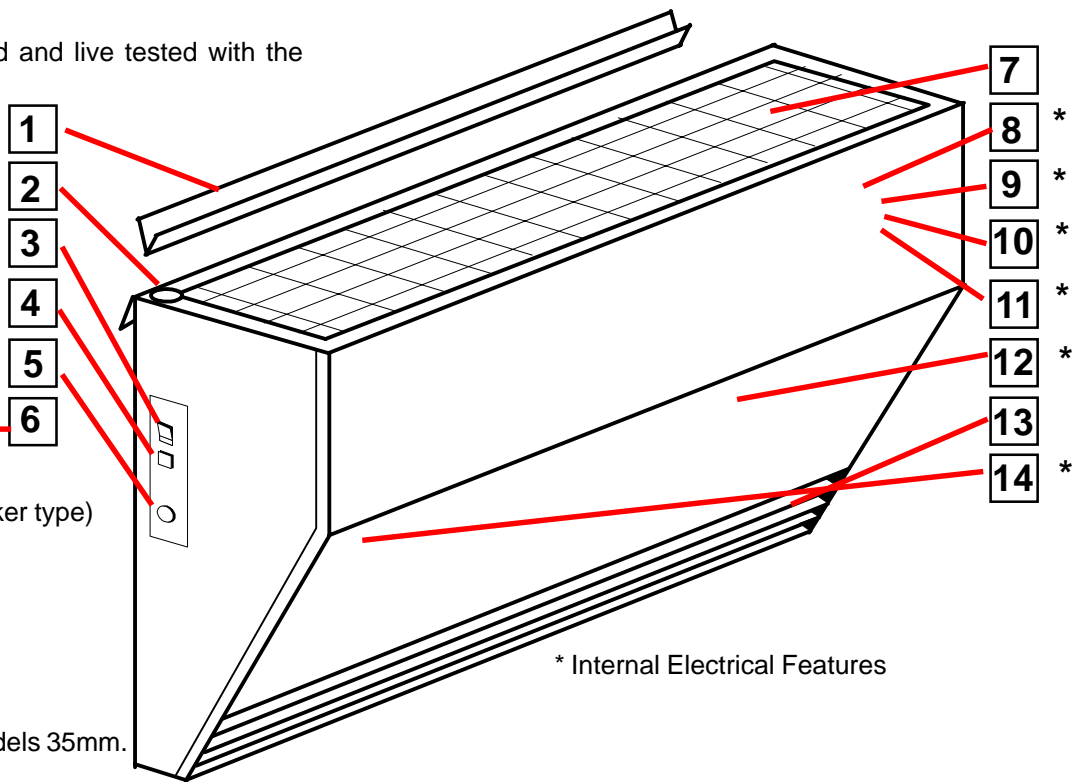
A Complete Package

All models are supplied pre-wired and live tested with the following controls:

Typical Control Panel



- A** ON/OFF Switch (Key or rocker type)
- B** LOW HOLD Switch
- C** FAN ONLY or HEAT Switch
- 1** Wall Hanging Bracket.
- 2** Cable entry hole. (For ST models 35mm. For SL models 25mm.)
- 3** 3 Pole Isolator.
- 4** Manual Reset (capillary and bellows type) Over Temperature thermostat.
- 5** Multi Stage Automatic Thermostat (2 or 3 Stage) switches in increments of 2% between each stage
- 6** Remote Control Panel (flush box mount) with switches for on/off fan/heat. * Specify key or on/off switch.
- 7** Cleanaire Air Filter (Basic disposable type supplied with heater other options available on request)
- 8** A Fusible Link on each element for ultimate failsafe control.
- 9** Air Pressure Switch (detects any "No Fan" fault)
- 10** Fan 'Run On' thermostat (cools entire system down at end of heat cycle)
- 11** Contactors and fused control circuit (230Volt, 50Hz - other voltages available).



* Internal Electrical Features

- 12** Fan & Motor - Fan is "direct driven" from motor - no belts or pulleys. Motor is built for industrial HVAC use, is multi-speed with maintenance free ball bearings. Resilient mounted for quiet operation. Automatic reset thermal overload.
- 13** 2 Way Adjustable air outlet grille (4 way optional extra.)
- 14** Pre-wired terminals for remote control or time clock (specify).

General Cabinet Detail Painted Models:

Fabricated steel sheet, Iron phosphate baked powder coat - two basic colours, B54800-00801 Off White end 85 2660-9095 Light Grey. Any Lusteroid colour optional at no extra cost. Other BS colours optional extra.

Utility Model:

Plain fabricated galvanised iron sheet. Welded corners silver primed.

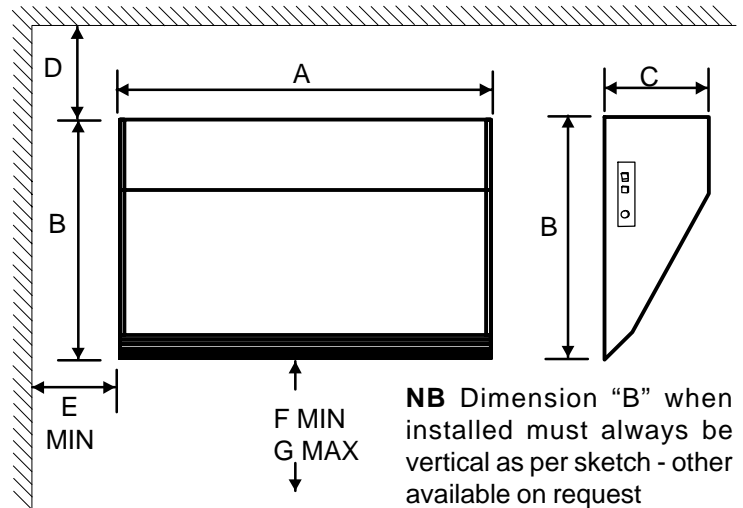
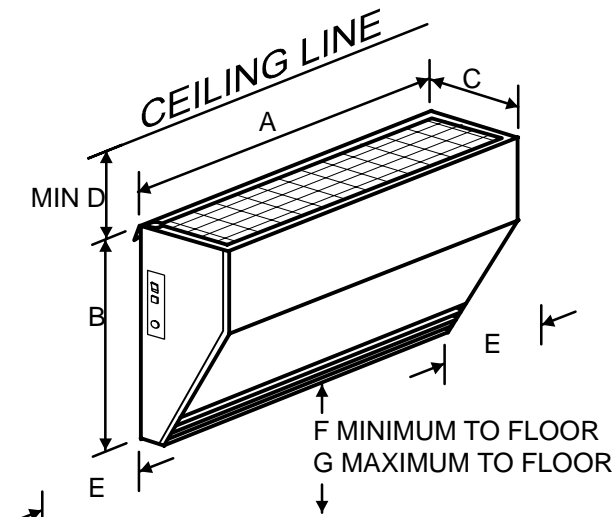
Optional Extras for All Models

- **Third stage on two stage models.**
- **Simple User Friendly Controls :**
- Dual thermostat** - particularly useful for halls/gymnasiums with multi-uses - one thermostat set for "Games" @ say 15°C and the other for "Socials" @ say 20°C. A simple switch selects between the two - eliminates tampering with thermostats
- "Low hold"** switch - for Churches, meeting rooms etc. Use Low hold to keep fans on low speed for ultra-quiet operation during important speeches, sermons etc.
- Elapsed time timers** - for positive "Off" after use.
- Coin and token meters** - for public hall hire etc.
- **Rough usage protection** - for gymnasiums. Strengthened panels and control covers protect against ball strike.
- **Air inlet protection** - variety of grilles of differing mesh sizes are available to protect inlet from balls, shuttlecocks, paper etc.

- **"Master and Slave"** control systems, with 24Volt transformer in master unit and terminals in each heater, all pre-wired for simple on site installation.
- **Heat Syphon** - A duct section to increase height of air inlet where ceiling heights are excessive. Small door provides access to air filter. Available 1.2m, 1.5m and 2.3m (usually only with Standard models).
- **Back Vent Kit** - (Note: See photo of ST model) Diverts up to 40% output through a back vent. Two types are available, manual or motorised with remote control.
- **Fresh Air Supply Kit** - For clubs, bars and rooms where ventilation is essential. Kitset fits on top and provides user with choice of recirculated air or fresh air (back or top air inlet). Can be wired to operate with an exhaust fan system, i.e. provides heated "make up" air.
- **Noise Levels** - Superfan Heaters are designed for average applications, as described. Lower noise level specifications can be met by adding optional acoustic insulation at time of manufacture. Enquire for details.

SPECIFICATIONS

		Standard Models			Slimline Models		
Model No		ST 18	ST 24	ST 36	SL 12	SL 18	SL 24
kW total capacity/stages		9/18 2 stage	12/24 2 stage	12/24/36 3 stage	6/12 2 stage	9/18 2 stage	12/24 2 stage
BTU Capacity		61,500	82,000	123,000	41,000	61,500	82,000
Amps per phase (balanced) @ 230Volts nominal		26	35	52	17.5	26	35
Average temp. rise @20°C ambient		40	44	40	40	48	50
Fan Capacity (litres per sec)	HIGH MED* LOW	750 610 500	900 750 610	1220 1080 700	500 300	600 300	600 300
Sound level dB(A) ST & SL Models Only	HIGH MED LOW	48 42 36	52 44 36	56 48 40	40 35 30	48 41 32	48 41 35
Automatic Thermostat (range 8°C to 40°C with 2°C increments)		2 stage	2 stage	3 stage	2 stage	2 stage	2 stage
Air throw (metres)		12	14	17	10	12	15
Control Voltage		230	230	230	230	230	230
Dimensions SEE BELOW	A B C D E F G	900 850 450 100 1000 3m 5m	900 850 450 150 1200 3.5m 6m	1105 850 600 250 1500 4.5m 7m	1000 500 400 80 750 2m 4m	100 500 400 100 1000 2m 5m	1000 500 400 150 1200 3m 6m
Weight (kg)	Crated	42 63	42 63	56 80	32 52	32 52	32 52



SPECIFICATION NOTES:

Requires 3 phase neutral and earth supply. Rated for Australia and New Zealand standard voltage.

Model variations available on application, up to 144kW

Performance figures guide only. Voltage variations and atmospheric conditions may alter actual performance.

"Throw" is approximate distance air moves, without restriction until its velocity reduces to 0.25m/s (50ft/min).

24 Volt controls are optional - no extra cost unless transformer is required, internally in heater (specify as required)

Where used as a warm Air Curtain, these units can be positioned 2m above the floor

* Fan Capacity. Where 3 speeds are quoted, medium or low is optional on 2 stage models, as preferred.

SAFETY PROTECTION

Superfan Heaters have safety features which exceed the requirements of NZS6000 and AS3103, but are not designed for use in hazardous areas.

If hazardous dusts, vapours or material are present consult your local dangerous goods inspector to determine area classification.

Avon can advise on modifications or alternatives for hazardous areas.

EXTENDED WARRANTY

The superior manufacturing techniques and high quality materials enable a two year warranty to be offered on Superfan Heaters including parts, labour and mileage.

Consequential losses, or faults due to blocked or restricted air filters are specifically excluded.

Errors and Omissions Excepted: All calculations are presented as realistically as possible **MADE IN NEW ZEALAND**