

# SUPERFAN HEATERS

*Space Heating for Every Situation!*

**2020**

SL041



SL154



SL146



*NZ Manufactured & customised  
for over 50 years!*

Product Catalogue

[www.avonelectric.co.nz](http://www.avonelectric.co.nz)

**Avon**  
ELECTRIC Ltd

# SUPERFAN

## SPACE HEATERS

### HISTORY

The Superfan Heater was designed in New Zealand by Avon over 50 years ago and has been manufactured and customised in house by Avon ever since to meet the needs of the New Zealand Market.

### APPLICATIONS

Superfan Heaters provide heating solutions for a wide range of building applications by delivering huge volumes of “heat on demand” at a low capital cost per kilowatt.

- Community Centres
- Schools
- Club Rooms
- Gymnasiums
- Honey Warm Rooms
- Churches
- Garages
- Halls & Warehouses
- Hospitals
- Offices
- Retail Shops
- Supermarkets
- Restaurants
- Hotels

### CUSTOMISATION

Standard Superfan cabinets can be powder coated to your specification. We are happy to work with you to offer custom solutions for tricky or hard to install sites, such as recessed cabinets, ball or tamper proof guards, and customised mountings. Controls offered to suit your requirements. Options for low temperature rise models (i.e. for Honey Rooms)



	SL041	SL154	SL146 - NEW
HEATING CAPACITY	10 to 48kW	UP TO 12kW	UP TO 8kW
HEATING STAGES	1-4	1-3	1-2
AIRFLOW (APPROX)	1100 L/s	350 L/s	280 L/s
FAN POWER	600W	130W	300W
DIMENSION 'A'	523 mm	403 mm	265 mm
DIMENSION 'B'	1105 mm	1005 mm	584 mm
DIMENSION 'C'	656 mm	509 mm	522 mm
MAX AMBIENT TEMP	38°C	38°C	38°C
FINISH	POWDERCOAT	POWDERCOAT	POWDERCOAT
AIR FILTER	EU3*	EU3*	EU3*

\*Or specify any other Air Filter



SL041



SL154



SL146

## CONTROLS

Superfan Heaters and their controls are customised to suit your criteria.

### TEMPERATURE CONTROL

Commonly used Temperature Controllers (can be installed internally or remote).....

- **2-3 Stage Mechanical Thermostat** (8-38°C with 2°C between Stages)
- **Carel Electronic Temperature Controller** (Adjustable Range & Parameters + Digital Display)
- **SSR Load / Temperature Control**
- **Master & Slave or Individual Control**

### SAFETIES

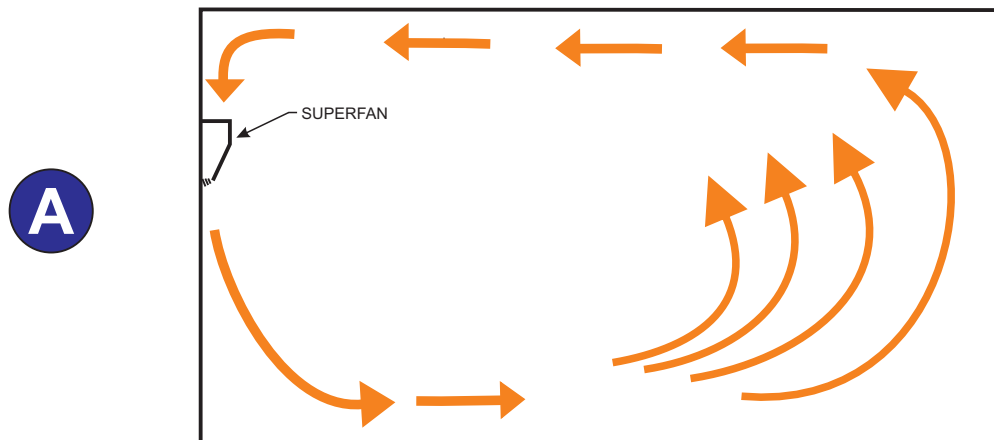
Safety is a high priority for all Avon heating equipment so Superfan controls and equipment layout are designed to suit the application. As standard Avon fit the following safeties (minimum):

- 2 x Manual Reset Over-Temperature Thermostats
- 1 x 25Pa Air Pressure Switch (No Fan / No Heat)
- 1 x Fan Run-On Thermostat (Runs-On fan to cool elements and brings on fan if any or all other safeties fail)
- 1 x Dedicated Fusible Link across each individual heating element (protection of last resort)
- Fused Control Circuit
- Fan Motor Internal Protection
- Differential Air Pressure Switch monitors Air Filter & activates bright LED (or other specified alarm)
- An Air Filter is essential to prevent an internal build up of airborne particulate.

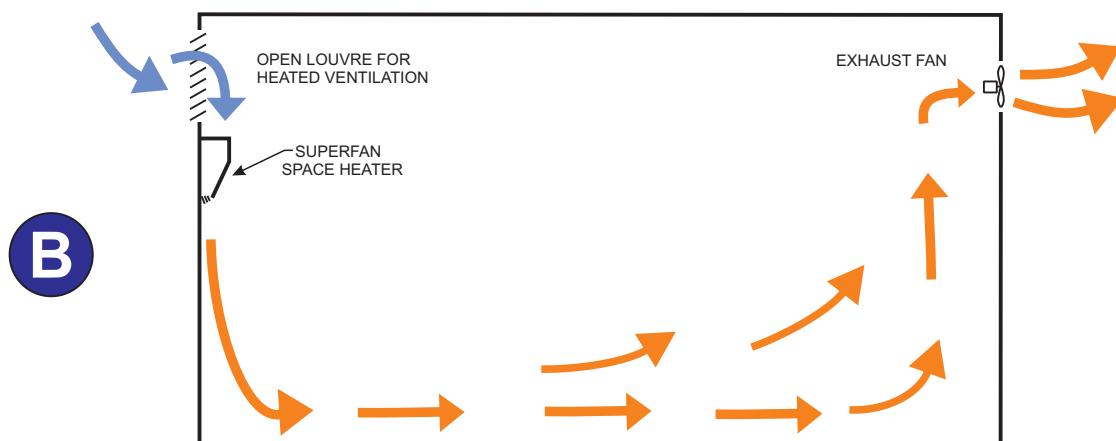
### OPTIONAL EXTRAS

- Replace Air Filter LED
- Low/Hold Switch (Fan Speed Control Override)
- Key Switch
- Tamper Proof Covers over external controls (For gymnasiums etc)
- Ball Repelling Guards (Gymnasiums)
- Custom Wall Mountings
- Hot Water Coils Available
- Low emissivity heating elements
- Outdoor air/recirc air plenum with motorised damper.

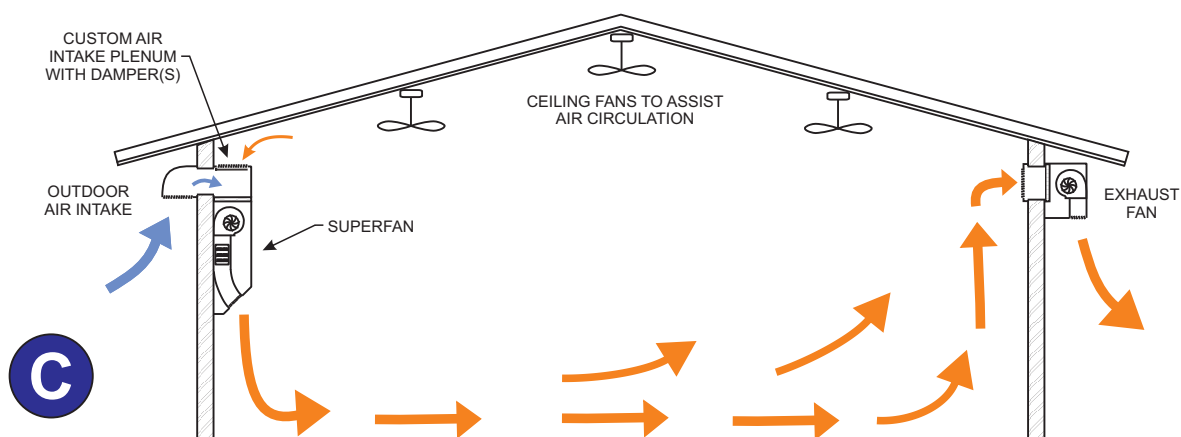
# EXAMPLE SYSTEM LAYOUTS



RECIRCULATING SETUP



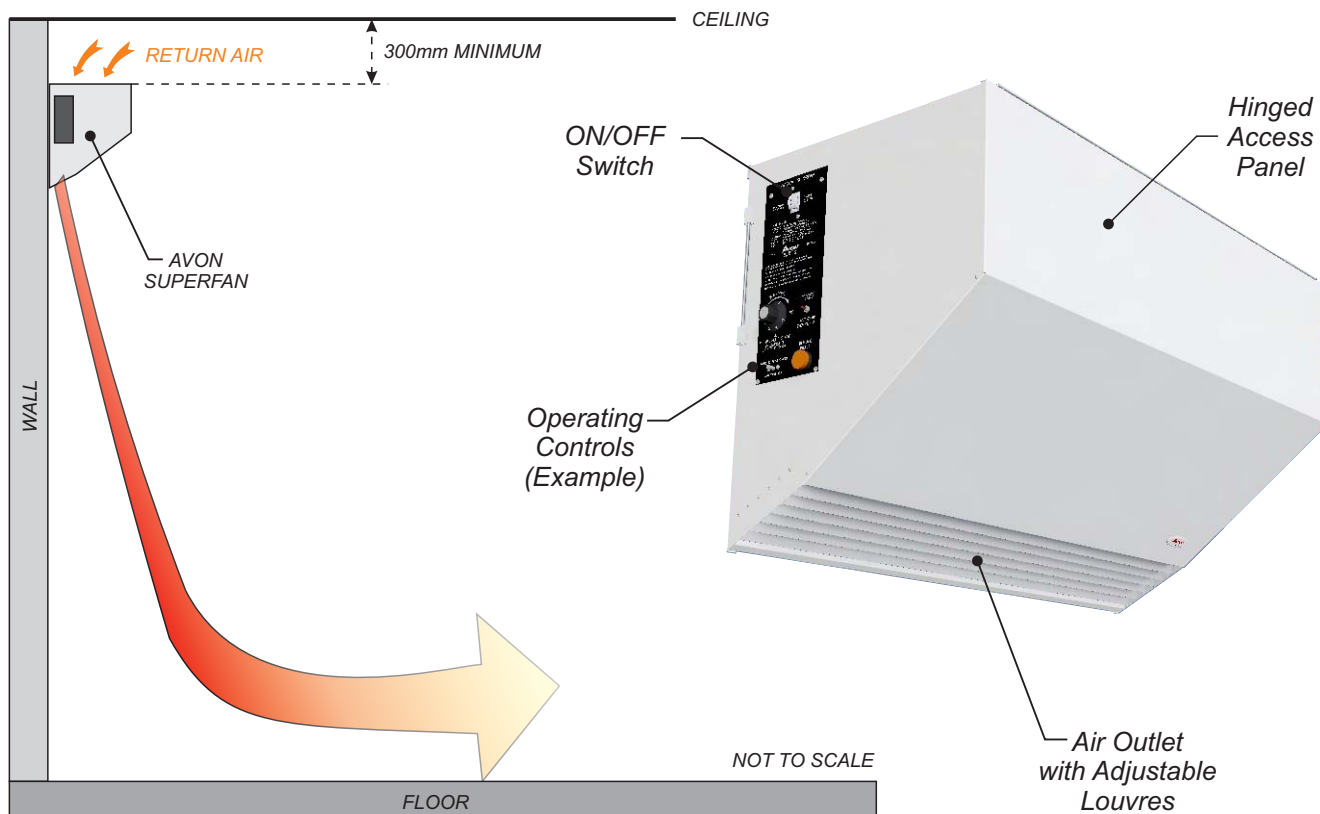
OUTDOOR AIR INLET THROUGH WALL LOUVRES FOR LOWEST COST VENTILATION COMPLIANCE



COMPLEX SETUP WITH OUTDOOR INTAKE AND RECIRCULATION MODES TO COMPLY WITH NZS 4303:1990

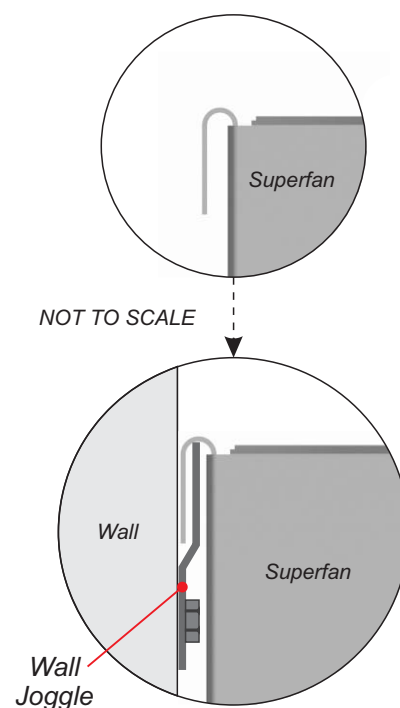
# SUPERFAN MOUNTING

INDOORS (IP20)  
DOWNBLAST  
AIRFLOW ONLY



## STANDARD MOUNTING BRACKETS

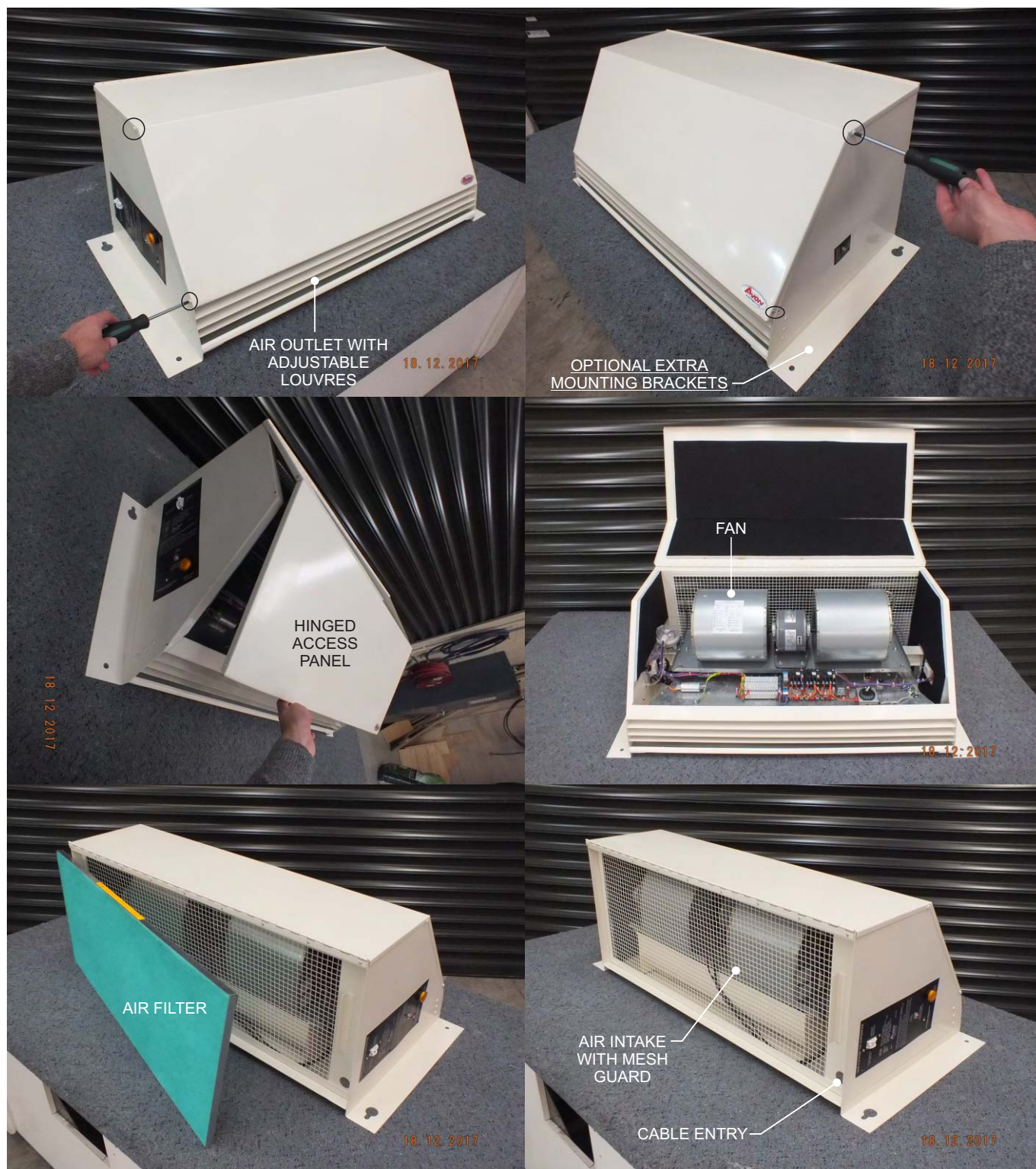
Standard mounted Superfans are provided with a 'Joggle Bracket' for initial fixing. To install the Superfan: suitably fix the 'Joggle Bracket' to the wall, 'hang' the Superfan on the 'Joggle', and secure the Superfan to the wall with other (as appropriate) fasteners (i.e through the back of Superfan Cabinet). Remove (and vacuum clean) any loose material (drill swarf etc).



EXAMPLE PHOTO OF SL146 SUPERFAN



## EXAMPLE PHOTOS OF TDI SUPERFAN (WITH OPTIONAL EXTRA MOUNTING BRACKETS)



*Example photos show the Superfan lying on its back - do not install this way.  
Superfan Heaters must be installed with vertical downdraught airflow only.*

# EXAMPLE CONTROL PANELS

PERSONALISED TO YOUR SPECIFICATION



A



B



C



D



E



F



G



H



I



J



K



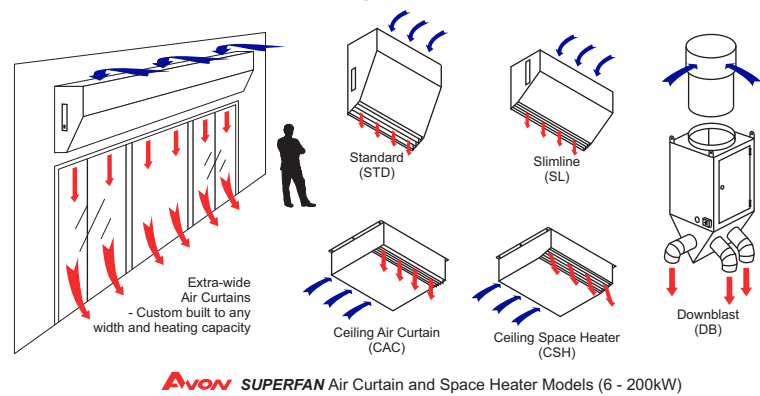
L

ON/OFF  
FAN/HEAT  
REPLACE FILTER  
FAULT  
LOW-HOLD

- Switches Superfan ON/OFF
- Switches Heating ON/OFF
- Light Switches ON when Air Filter needs to be Replaced
- Light Switches ON if safety devices in Heater trip.
- Switches Heating and Fan Speed to Low (to reduce noise for meetings etc)



## Avon Heated Air Curtains & Space Heaters



**Frico Thermozone Air Curtains for Overdoor – Vertical – Concealed**

Electric or Hot Water (e.g. Heat Pump from 40°C). Huge Range for the most discerning **Architectural, Commercial, or Industrial** sites including Chiller & Freezer Doorways.

Intelligent Electronic (SIRe) Control Systems for additional Energy Efficiency, 3 yr Warranty.

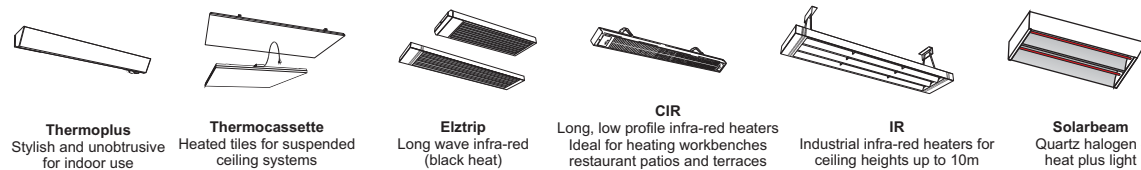
**Mars Air Doors**

High powered, US made industrial air curtains - to control flying insects, exclude airborne dust and contain conditioned air. Ideal for cool-room or freezer doorways, loading bays, food and beverage factories.

Dust, fumes & insects stay outside

Conditioned (hot or cold) air stays inside

## Infra-red Heaters, radiant heating solutions for domestic, commercial and industrial applications



**Fans**

**Torin - Systemair**  
Fischbach - Casals - Sodeca

Direct drive centrifugal fans. EC & Conventional. Up to 20m³/Sec

## Avon Direct Hot Air Heaters

**ELECTRODUCT**

Duct Heaters for ducted systems, process heaters, generator dummy loads etc.

Open wound spiral elements for minimal air-flow resistance. Custom built to any size and capacity.

Available from **1kW to 20,000kW**

**AVON AIR HANDLERS**

For outdoor air ventilation, process and comfort heating. For indoor or outdoor installation, with or without heating, supply or exhaust. Ventilation for Building Code compliance, integral fresh air/recirc dampers. CO² Controlled EC Fan Motors. Drying rooms, Kilns, Paint Ovens, Spray Boot, Honey & industrial Process Heaters. Air flows from 22l/s to 20m³/s. Temperatures up to 600°C

**IES HOT AIR GENERATORS**

Extremely versatile **Hot Air Generators** for continuous, non-hazardous\* use in Drying Ovens, Hot Rooms, Process Heating, Fibreglass Curing and more. Any enclosed space immediately transformed into a Hot Room. Recirc up to 250°C.

**calorex**  
DEHUMIDIFIERS

Dehumidifiers for Swimming Pools, Dry-rooms, Processes.

Turn key swimming pool systems up to 10m³/s.

Portable models available for hire or sale.

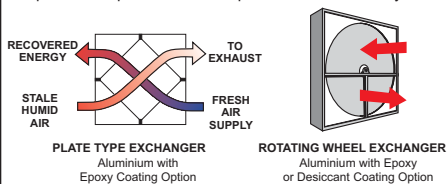
**TOYOTOMI**  
Made in Japan

FF95 Diesel Heaters for Homes, Offices, Halls, Bars, Clubs, Schools etc. Very quiet, 9.5kW output. Fuel injection burners operate at 92% efficiency, burns ordinary automotive diesel.

Has fully automatic user friendly programmable controls including "nozzle auto clean".

## HEATEX Air-to-Air Heat Exchangers

Energy recovery from any exhaust airstream, HVAC or Process. Temperatures up to 600°C and up to 95% heat recovery.



**Heat Recovery Ventilation** for Homes, Schools, Clubs, Bars, Offices, Restaurants, Conference Rooms, Theaters, Swimming Pools etc. 100% fresh outdoor air without the extra heating load.

**Process Energy Recovery** - reduce the running costs of commercial clothes dryers, process dryers (timber, fabric, foodstuffs etc). - up to 20 m³/sec

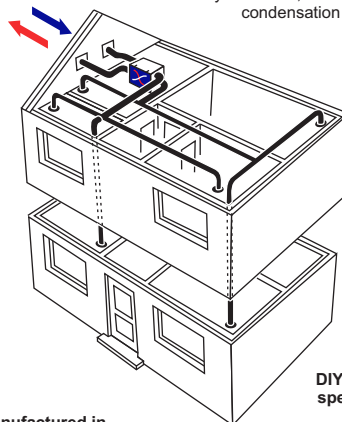
Vapour Extraction  
Dehumidification  
Indirect Evaporative Cooling

Since 1982 the largest range of Air-to-Air Heat Exchangers in Australasia

**HEATEX**

## CLEANAIRE Heat Recovery Ventilators

Domestic HRV systems ventilate and dehumidify the home, for allergy & condensation control



Manufactured in New Zealand since 1982  
6 + 6 year warranty

DIY kits a specialty

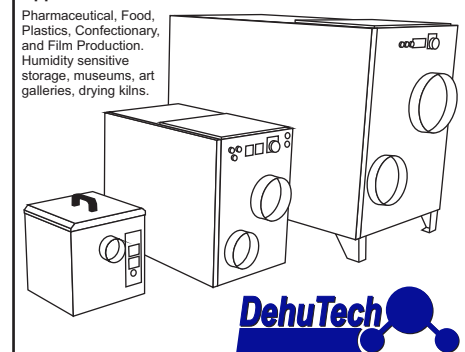
## DehuTech (Sweden) Dessicant Dehumidifiers

Dessicant dehumidifiers operate efficiently across a broad range of temperatures, especially at lower temperatures where conventional dehumidifiers fail to perform.

Air flows from 100 to 15,000m³/h, moisture removal rates from 0.6 to 126kg/h - ice removal - down to -35°C.

### Applications Include:

Pharmaceutical, Food, Plastics, Confectionary, and Film Production. Humidity sensitive storage, museums, art galleries, drying kilns.



**DehuTech**

### Sole Agents for:



NZ Agents for: VENMAR (Canada) ~ CRISPAIRE (USA) ~ E-TECH (USA) ~ DECTRON (USA) ~ TORIN (Australia) ~ FISCHBACH (Germany)