

AIRCOOL WITH THERMAL DIFFUSION

Aircool with Thermal Diffusion

The Passivent Aircool with Thermal Diffusion has been specifically designed to supply buildings with warm, fresh air during cooler weather. The unit also provides a fresh air inlet in warmer conditions, when warming is not required.

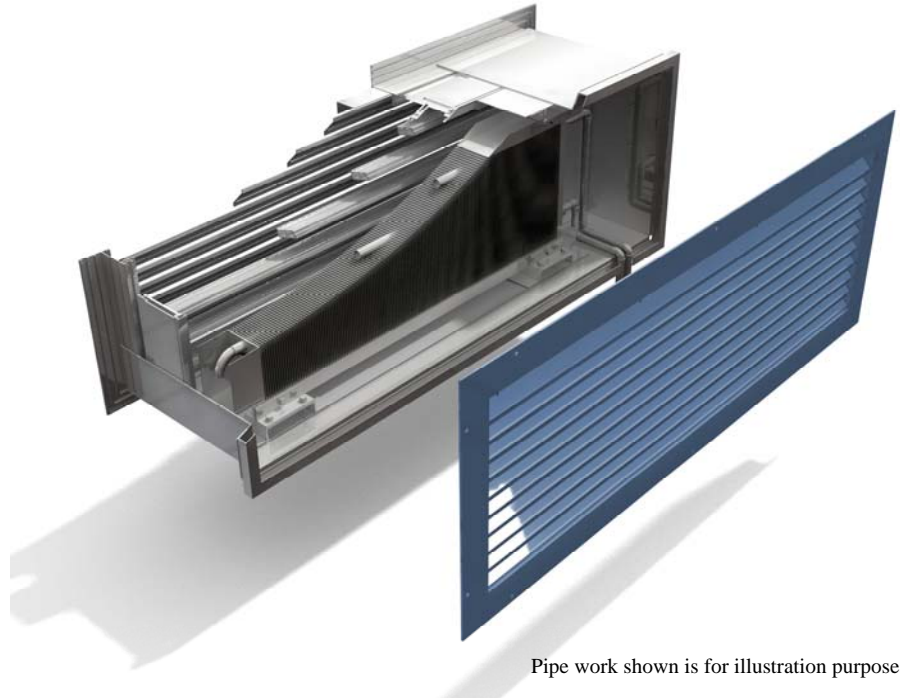
The unit will provide fresh air ventilation throughout the year and a secure night cooling strategy in warmer weather.

High Ventilation Rate

The Aircool with Thermal Diffusion system includes a low resistance air flow heater coil, which has been specially designed for natural ventilation systems. The overall Cd value is 0.36, resulting in high ventilation rates.

Fine Control

An off-coil temperature sensor located inside the unit, precisely controls the position of a water supply control valve. This unique control feature combined with the Passivent range of natural ventilation controllers ensures the correct level of ventilation is supplied at the required temperature.



Pipe work shown is for illustration purposes only

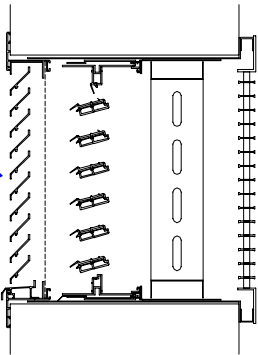
Features

- Specially designed natural ventilators with a heater coil to warm the supply air in cooler weather.
- Provides unheated air path in warmer weather and a secure night cooling device.
- Aesthetically pleasing with minimal protrusion into the room and slim design.
- Low pressure heater coil design to increase ventilation rates.
- Available as wall and window variants.
- Off-coil temperature sensor allows accurate control of supply air temperature.
- No additional site cabling required for off-coil temperature feature.
- Excellent weather protection and security are provided by external weather louvres.
- Electrically-actuated ventilators can be controlled individually or linked to an overall ventilation control system.
- 24V low voltage modulating actuators for occupant safety and user control.
- Thermally insulated damper blades to reduce heat loss when closed.
- Simple installation and maintenance access.
- Can be supplied in component form to provide greater flexibility in use.
- Acoustic version available.
- An extensive range of made to order sizes are available.
- Ventilation design and heat output calculation service is available from Passivent.

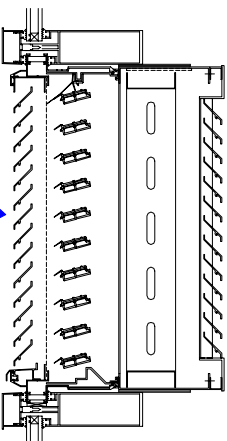
AIRCOOL WITH THERMAL DIFFUSION

Appearance

The Aircool with Thermal Diffusion is discreet, functional and aesthetically pleasing with its slim design. On the internal side of the unit, a cover grille is placed slightly proud of the finished surface to allow access for the hot water supply. The unit itself provides minimal protrusion into the space and has a compact design. Cover grille material and finishes are available in a range of different options. The unit can be purchased in component form.

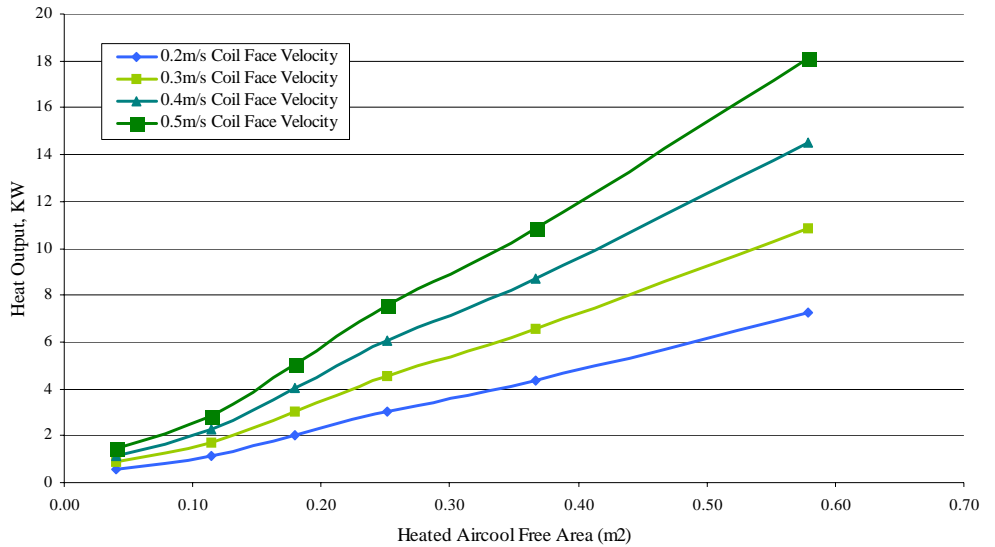


Section of a typical wall unit



Section of a typical window unit

Heat Output Vs Free Area



Heating Coil

The heating coil is constructed of copper tubes and aluminium fins within a galvanised steel frame. The tubes terminate at the same end with a 15mm female connector. Each heating coil is tested to 12 Bar before leaving the factory.

Maintenance

The actuator is the only driving part of the unit and is sealed for life and so therefore requires no maintenance. If replacement is required it can simply be accessed by removal of the cover grille and separate heater coil component.

Control

The motorised louvres are positioned by the internal low voltage modulating actuators to control ventilation rate. An 'off-coil' temperature sensor is located within the product, controlling the temperature of the supply ventilation air. The temperature control valve (available separately as an option) uses the 'off coil' temperature signal to modulate the flow of water to the coil. The 'off-coil' signal can be fed to the control panel using the standard cabling, and therefore requires no additional wiring on site. The Passivent control panel controls both the ventilation louvre and the heating valve to avoid conflict and ensure the heater valve closes when the louvres close.

PASSIVENT LIMITED

North Frith Oasts, Ashes Lane, Hadlow, Kent TN11 9QU Tel: 01732 850770 Fax: 01732 850949
Email: projects@passivent.com Web: www.passivent.com

Passivent maintains a policy of continuous development and reserves the right to amend specifications without notice.

BPD

A member of the Building Product Design Group

