



Positive Input Ventilation Systems



The Benefits of 'Input' Ventilation

For your home, health and lifestyle

So what is Positive Input Ventilation?

It is a concept to deliver fresh filtered air into a property at a continuous rate.

Did you know ...

- Hundreds of thousands of homes across the UK are benefitting from having a PIV unit installed?
- It is the second most popular method of ventilating homes after intermittent extract fans?

The reason is ...



In addition to the 112 pints of moisture that an average family produces per week through cooking, bathing, ironing and breathing, a concoction of other contaminants is present in the air within our homes.

These can have a detrimental effect on the fabric of our homes and the health of our families. With improved building features in our homes, such as cavity wall insulation, double glazing and draught proofing, 'natural ventilation' is prohibited. Stale, contaminated air is trapped causing streaming windows, which ultimately leads to musty smells, dampness and mould growth.



Relative Humidity

At extremes of low (below 30%) or high (above 70%) relative humidity levels, these contaminants and dust mite populations are exacerbated to trigger illnesses such as, headaches, nausea, fatigue and more serious problems including asthma, allergies and eczema.

Adapted from: www.scotland.gov.uk

Bacteria					
Virus					
Mould / Fungi					
Mites					
Allergy / Asthma					
Tracheal Infection					
Chemical Reactions					
Ozone Production					
% Relative Humidity	10	30	50	70	90



The effect of not having good quality air in the home is dramatic. Condensation and mould are serious problems.



The Lifetime Range® is designed for a sustainable future.



Did you know that there are up to 900 chemicals in indoor air?

Scientific Committee on Health and Environmental Risks (SCHER).

The Solution ...

The solution is Positive Input Ventilation (PIV) or MIV®. The EnviroVent positive ventilation units are sophisticated whole home ventilation and condensation control units. By drawing in fresh, filtered and clean air from outside, the units gently ventilate the home from a central position on a landing in a house or the central hallway in a flat or bungalow.

Moisture laden air is diluted, displaced and replaced to control humidity levels around 55%. This significantly reduces or eliminates surface condensation, the main cause for mould growth. With lower humidity levels, dust mite populations are also substantially reduced to provide a significant improvement in the health of asthma sufferers and general indoor air quality. Positive Input Ventilation is also available for flats and apartments. Turn to pages 9 and 10 for further information.



Shortly after the unit is installed:



The unit gently ventilates the home with fresh air. Air is pushed back down into the house and redistributed. Humidity is replaced and diluted to leave a healthy, fresh and clean environment to live in.



House is now free from contaminants



The units transform a stagnant, stale atmosphere into a fresh, healthy and condensation free environment.



Upgrade to MIV®

Building on the principles of PIV, EnviroVent has developed a new and innovative technology – Multiple Input Ventilation (MIV®).

What is MIV®?

MIV® has the ability to supply fresh, filtered air via multiple inputs into areas with greater requirements for ventilation. Fresh air inputs can be located in areas generating higher humidity (kitchen, bathrooms, en-suites etc) or in bedrooms of an asthma/allergy sufferer. To read all of the benefits of MIV® please turn to pages 6 and 8 to find out more.

Which product is right for me?





5 Years



Loft Space
Yes
No
No
5 Years
3-5



PIV Air Source	
Loft Space	
Yes	
Yes	
No	
5 Years	
3-5	



MIV® Loft Mounted Unit

Loft Space

Yes

No

Yes

5 Years

6-8



MIV® Air Source

Loft Space

Yes

Yes

Yes

5 Years

6-8



Mould is a serious problem in the home and if you paint over the problem, it will only come back.



By improving the quality of the air in your home you can considerably reduce house dust mite populations a major trigger of asthma.



The average 6 room house collects 40 pounds of dust a year.

Discover Magazine

PIV Loft Mounted Unit

Whole House Positive Input Ventilation System











The EnviroVent Loft Mounted Unit is a sophisticated whole home ventilation and condensation control unit for homes with a loft space. The unit gently ventilates the home from a central position on the landing in a house or the central hallway in a bungalow to transform a stagnant and stale atmosphere into a fresh, healthy and condensation free environment.

> Superior long life filters Ultra Low Watt DC motor

technology

Integral Pre-Heater

-> 5 year guarantee

condensation

Expert fitting staff

Quiet operation

Eliminates mould.

Improves air quality

of solar gain

BBA approved

vear quarantee.

Energy Efficiency

Powered by an Ultra Low Watt Brushless DC Motor, the EnviroVent Loft Mounted Unit utilises the latest technology to ensure minimum energy consumption and long term trouble free life, achieving up to 80% more efficiency than a traditional AC fan.

The unit takes maximum advantage of the benefits of solar gain from within the loft space - the natural accumulation of heat from the sun on bright days. Temperatures in the loft space are on average 3°C higher than outside, which results in a relative saving of around 150 Watts per day in an average modern family home. This equates to approximately 10% of annual heating costs.

Warm air accumulates at ceiling level. This air can be up to 7°C higher than the internal air at ground level. By introducing an almost imperceptible air supply into the dwelling from the loft space, the EnviroVent Loft Mounted Unit helps to redistribute heat around the home and thus reduce space heating costs.

During the heating season significant energy is lost incurred by opening windows to reduce humidity and condensation. By installing an EnviroVent Loft Mounted Unit and providing fresh filtered air to the home humid air is displaced without opening windows and thus making significant savings to the occupier.



Health Benefits



With improved building features in our homes, such as cavity wall insulation, double glazing and draught proofing 'natural ventilation' is prohibited. Stale air is

trapped causing streaming windows, which ultimately leads to musty smells, dampness and mould growth.

These mould spores are known allergens andbecomeairborne the slightest disturbance. The microscopic spores are then inhaled and can trigger respiratory problems such as asthma, dust allergies and hayfever.

The EnviroVent Loft Mounted Unit draws fresh air into the dwelling from outside and filters it before being delivered into the property.

Moisture-laden air is diluted, displaced and replaced with clean, tempered and filtered air. This eliminates or reduces surface condensation, which causes mould growth. providing a significant improvement in the health of asthma sufferers general indoor air quality.





This product is supplied with a five



The packaging is made from recycled

Life-Cycle Costs



5 year on-going maintenance free warranties and superior long life filters the unit achieves the lowest life-cycle costings.

All repairs, maintenance and component replacement is carried out simply and quickly by exchanging the filters and consumable items. The worn out components are then taken back to the factory to be recycled thus reducing the impact on landfill and saving millions of pounds in replacement costs.

Pre-Heater and Hours Run Meter

The integral pre-heater is designed to temper the incoming air during periods of low external temperatures.

A sensor monitors incoming air and pulses the heater to ensure temperatures are held to preset minimums. Three independent safety cutout devices shut down the heater in the event

of fan fallure. The heater facility is controlled independently from the fan by a conveniently positioned enable/disable switch.

For monitoring of operational life and verification of usage, an integral Hours Run Meter is fitted.





Upgrade to PIV Air Source



Going beyond traditional input ventilation, the PIV Air Source has the facility to source cooler air from outside the building when the temperature in the loft space rises above 25°C or on demand through a

multiple of wireless control switches. Detecting the rise in temperature, the unit starts to draw air from atmosphere via a temperature controlled diverter mechanism. This not only provides efficient perception cooling into the property during warmer weather, but also maintains the required level of ventilation continuously throughout the year. This facility is greatly beneficial for properties affected by high levels of Radon.

Annual Running Costs (>)



DC C I

Running Cost

- L. Loft Wats on overage eathing (delivering 36 litres of or per second to dee

 a. The overage outdoor temperature October the March 31 in the heat
 of the conference of the litre of the conference of the litre overage of the conference of the litre overage of the litre over the complete heating season.

 U. The laft auch heating ensures that the air entering the dealling never falls below 10°C.

 - IOC.
 Therefore the required rise in temperature will average 2°C.
 The energy required to raise 36 litri second of incoming air by 2°C is 300 with

 - watte.
 Between October 1 to March 31 there are
 4380 hours
 4380 x 100 438000 watts
 438 Ke (or units at 16.4c per unit)
 671.83 amuel cost
- 2. ENSURING HEATER IS DISABLED IN PERIODS WHERE HOUSE IS UNKNOCOUPLED WILL REDUCE COSTS FURTHER
- 3. Electricity cost taken as 16.4cent per Kw/h
- n power consumption

 0. Trickle 24 l/x

 1. 4. Leatte 0.0041 ke

 1. 0.0041 x 60.164 x 365 days x 24 heurs

 10. 0.0041 x 60.164 x 365 days x 24 heurs

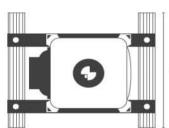
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 10. Medium 36 l/s

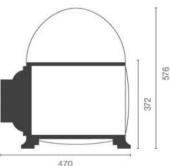
 1. 6.2 watte 0.0062 ke

Dimensions (mm) 🚫





405





Don't have a loft space? Don't worry, turn to pages 9 and 10 for the EnviroVent Wall Mounted Unit which is suitable for flats and apartments.



The effect of not having good quality air in the home is dramatic. Condensation and mould are serious problems.

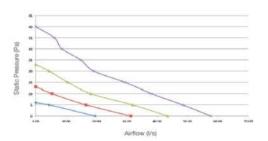


Our dedicated Construction Division takes the hassle and complication out of ventilation system design. Contact us now to request a brochure.

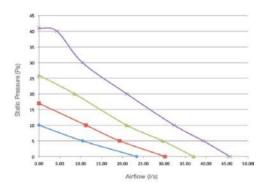
Performance Curves (>)



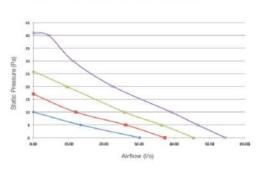
PIV Loft Mounted Unit



PIV Air Source with summer by-pass NOT activated



PIV Air Source with summer by-pass activated



-- Large

-- Boost

Technical Specifications (>)



Product
Whole house positive input ventilation system for properties with a laft space.

PIV Loft Mounted Unit

Sited in a lot space, the unit delivers air to the central hallway or landing via a four-way diffuser with purpose made blank plates to maximise efficiency of airflow and aid in heat recovery from ceiling level. This provides displacement ventilation in order to improve air quality and resolve condensation related

PIV Air Source
The PIV Air Source Unit has the additional facility to draw air from atmosphere during the warmer months of the year when the temperaure in the loft space exceeds 26°C. This provides efficient perception cooling into the property and maintains the required level of ventilation continuously throughout the

Performance & Sound Levels

Unit	PIV Loft Mounted	PIV Air Source with summer by-pass not acvtivated	PfV Air Source with summer by-pass acvtivated
Maximum Airflow I/s (m²/h)	69 (212)	46 (165)	54 (194)
Maximum Power (W)	9	8	a
Maximum Sound Levels dB(A) © 3m	28	28	28
Speed Settings	Ä.	4	4.

The unit must be secured firmly to the joists using cross batons for lifetime installation. Full installation guide is enclosed with all products; or sent separately in advance - if required.

Construction
ABS plastic to contain at least 50% recycled material.

Incorporates the Ultra Low Watt DC motor technology with sealed for life ball bearings designed to operate continuously at a pre-set 'background' rate.

is a 140 x 220mm centre mounted forward curved centrifugal fan.

reset is a synthetic fibre based filter mat to G4 standard in accordance with EN779 standard ratings, conforming to all European Union and US fire classification standards (e.g. DIN 53438-F1 and UL900-class 2) and be self-extinguishing.

Servicing / Maintenance
Achieved by exchanging filters and consumable items. There should be no requirement for any maintenance within the five year period.

Covered by an on-going, repeatable 5 year warranty, subject to the completion of specified maintenance.

Integral 'Intelligent Low Temperature' Comfort Heater
Powered by a single supply and capable of holding incoming air temperatures reasonably accurately
– around 10°C. The heater element is manufactured in a solid tubular sheath material and not in open

Accreditations BBA - Certificate No.: 03/4043 CE - EMC Compliance; EEC/89/336 Low Voltage Directive IEC 72/73/EEC

Options & Ancillaries 📀



Product o	Description o	EnviroVent Code •
5	EnviroVent Diffuser	1DIF EVL DIF
		1RD FLEX 200 X 1M
5	Flexible Hose Ducting Ø200	1RD FLEX 200 X 3M
		1RD FLEX 200 X 6M



Did you know that poor indoor air quality can cause or contribute to the development of chronic respiratory diseases such as asthma?

Trickle

- Medium



Did you know that indoor air can be found to be significantly more polluted than outdoor air?

NHBC Report, "Indoor air quality in highly energy efficient homes" July 2009

MIV® Loft Mounted Unit

Multiple Input Ventilation (MIV®)











Building on the principles of the hugely successful and established EnviroVent PIV systems, the MIV® Loft Mounted Unit has been designed and developed to launch a totally new and innovative technology - Multiple Input Ventilation (MIV®).

- 100 M Ultra Low Watt DC motor technology Sealed for life ball bearings -> Loft or external air supply Optional intelligent comfort heater Optional wireless boost facility -> 5 year on-going maintenance free warranties Provides all year round quality filtered air Reduces/eliminates surface condensation Quiet operation Removes musty odours -> Enhances heat distribution > Takes advantage of the benefits of solar gain in the loft space Benefits asthma sufferers by reducing dust mites and mould > Reduces Radon levels > Easy to install

How is it different?

Instead of providing just a single source of fresh air into a property, usually located in a hallway or landing, the MIV® Loft Mounted Unit has the ability to supply fresh, filtered air via multiple inputs into areas with greater requirements for ventilation.

Highly efficient, inputs can be situated in rooms affected by increased levels of humidity, such as the kitchen, bathrooms and other wet rooms.

Fresh air inputs can also be located in bedrooms or living spaces that suffer from particularly bad condensation or in the bedroom of an asthma sufferer to reduce the level of humidity and therefore the house dust mite population – a known trigger for allergies and asthma.

Unique EnviroVent Mini Diffuser



Available with the MIV® Loft Mounted Unit is the stylish EnviroVent energy saving diffuser, providing an innovative alternative to standard ceiling vents. Simple to commission

and install, the diffuser is designed with easy to clean filters, which prohibit contaminants entering the property. These also act as a second defence against pollen and other airbourne contaminants in conjunction with the unit's internal filter. Side panels can be easily blanked off according to its location.



Make it MIV® Multi-Zone Destratification

Warm air accumulates at ceiling level and is normally lost through windows and extract fans. This air can be up to 7°C higher than the internal air at ground level. By introducing an almost imperceptible fresh air supply into multiple rooms, the MIV® Loft Mounted Unit redistributes heat around the home by pushing the heat back down and keeping the convection currents moving to reduce space heating costs. By saving only 1 degree of heat the multi-zone destratification can cut fuel bills by 10%.



Upgrade to MIV® Air Source

Solar Gain and Summer Cooling



The MIV® Air Source takes maximum advantage of the benefits of solar gain from the loft space throughout the year. Solar gain is the natural accumulation of heat from the sun on bright days. Temperatures in the loft are on average 3°C

higher than outside and as the unit draws fresh air from the loft and delivers it into the property, this results in a saving of around 500 Kilowatts of energy per year in an average family home equating to significant savings in annual heating costs. Going beyond traditional input ventilation, the MIV® Air Source has the facility to source cooler air from outside the building when the temperature in the loft space rises above 25°C or on demand through a multiple of wireless control switches. Detecting the rise in temperature, the unit starts to draw air from atmosphere via a temperature controlled diverter mechanism. This not only provides efficient perception cooling into the property during warmer weather, but also maintains the required level of ventilation continuously throughout the year. This facility is greatly beneficial for properties affected by high levels of Radon.



This product is supplied with a five year guarantee.



The packaging is made from recycled material.

Annual Running Costs 📀



Calculation is based on electricity cost at the time of print. The MIV® Air Source Unit has been calculated at 320 days supplying air through the filter and 45 days sourcing directly from outside taken from average annual temperatures. The calculations must therefore be used as a guide only.

Settings

MIV® Loft Mounted Unit

8. 81	k Atti	A 1	C	
17/1	V.,	All	So	urce

Trickle	Medium
£3.18	£4.35

Trickle	Medium
£4.45	£5.51

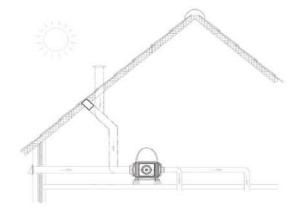
Annual running cost comparisons against other household appliances

Household Appliance	MIV* Loft Mounted Unit Time required to consume £4.35 of electricity	MIV* Air Source Time required to consum: £5.51 of electricity
Fridge Freezer	15 Days	19 Days
21" TV (Viewing Time)	11 Days	14 Days
100W Light Bulb	11 Days	14 Days
Home Computer	3.5 Days	4.5 Days
Games Console	3.5 Days	4.5 Days
iron	30 Hours	38 Hours
Tumble Dryer	12 Hours	14.5 Hours
Coldfill Dishwasher	13 Full Loads	16.5 Full Loads

Annual running cost with heater DISABLED. All costs are based on an electricity cost of £0.15 per unit (kWh).

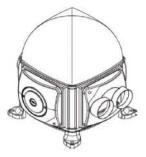
MIV® Air Source Installation (>)

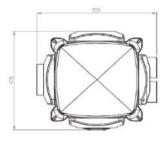




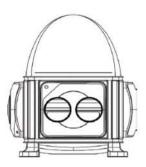
Dimensions (mm)













Did you know England's landfill sites 'to run out of capacity by 2020' -Defra.



Every product in EnviroVent's Lifetime Range[®] is manufactured in Harrogate, United Kingdom.

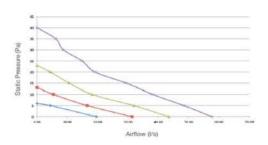


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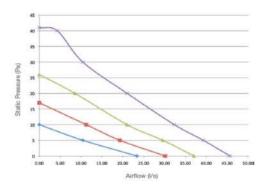
Performance Curves (>)



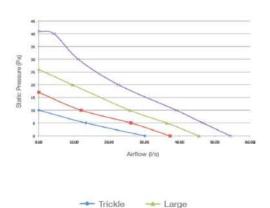
MIV® Loft Mounted Unit



MIV® Air Source with summer by-pass NOT activated



MIV® Air Source with summer by-pass activated



-- Boost

Technical Specifications (>)



Product
Whole house multiple input ventilation system for properties with a loft space.

MIV* Loft Mounted Unit Sited in a loft space, the unit delivers air to multiple rooms of a property to provide dispi ventilation in order to improve indoor air quality and resolve condensation related problems.

MIV*Air source During warmer months of the year when the temperature in the loft space exceeds 25°C, the MIV* Air Source has the additional facility to draw air from atmosphere via a temperature controlled diverter mechanism. This provides efficient perception cooling into the property and maintains the required level of verifiation continuously throughout the year.

Performance & Sound Levels

Unit	MIV* Loft Mounted	MIV* Air Source with summer by-pass not acvtivated	MIV* Air Source with summer by-pass acvtivated
Maximum Airflow I/s (m³/h)	59 (212)	46 (166)	54 (194)
Maximum Power (W)	9	В	8
Maximum Sound Levels dB(A) @ 3m	28	28	28
Speed Settings	4	4.	4

Installation
Full installation guide is enclosed with all products; or sent separately in advance - If required

Motor incorporates the Ultra Low Watt DC motor technology with sealed for life ball bearings designed to operate continuously at a pre-set 'background' rate.

Fan Is a 140 X 220mm centre mounted forward curved centrifugal fan.

Filter Is a synthetic fibre based filter mat to G4 standard in accordance with EN779 standard ratings. The filter should conform to all European Union and US fire classification standards (e.g. DIN 53438-F1 and UL900-class 2) and be self-extinguishing.

Servicing / Maintenance
Achieved by removal/exchange/replacement of filters and consumable items. There should be no requirement for any maintenance within the five year period.

Covered by an on-going, repeatable 5 year warranty, subject to the completion of specified

Integral Intelligent Low Temperature' Comfort Heater
Powered by a single supply and capable of holding incoming air temperatures reasonably accurately
around 10°C. The heater element is manufactured in a solid tubular sheath material and not in open

Accreditations CE - EMC Compliance: EEC/69/336 Low Voltage Directive IEC 72/73/EEC

Options & Ancillaries 🚫



Product •	Description •	EnviroVent Code •
1	EnviroVent Mini Diffuser	1DIF EVL SML1
11	Round Rigid Ducting Ø100	1RD 100 X 2M
00	90" Bend	1RD 90 BEND 100



Check out pages 1 and 2 to discover how 'input' ventilation can benefit your home, health and lifestyle.

- Medium



The effect of not having good quality air in the home is dramatic. Condensation and mould are serious problems.

Wall Mounted Unit

Whole House Positive Input Ventilation System











The EnviroVent Wall Mounted Unit is designed to provide whole home ventilation and eradicate condensation from homes without a loft space. Energy efficient, the unit introduces an almost imperceptible air supply throughout the living space to transform a stagnant and stale atmosphere into a fresh, healthy and condensation free environment.



Energy Efficiency

Powered by an Ultra Low Watt Brushless Motor, the EnviroVent Wall Mounted Unit utilises the latest technology to ensure minimum energy consumption and long term trouble free life.

Warm air accumulates at ceiling level. This air can be up to 7°C higher than the internal air at ground level. By introducing an almost imperceptible air supply into the dwelling, the EnviroVent Wall Mounted Unit helps to redistribute heat around the home and thus reduce space heating costs.

During the heating season significant energy is lost incurred by opening windows to reduce humidity and condensation.

By installing an EnviroVent Wall Mounted Unit and providing fresh filtered air to the home humid air is displaced without opening windows and thus making significant savings to the occupier.

Health Benefits



With improved building features in our homes, such as cavity wall insulation, double glazing and draught proofing 'natural ventilation' is prohibited. Stale air is

trapped causing streaming windows, which ultimately leads to musty smells, dampness and mould growth.

These mould spores are known allergens and become airborne at the slightest disturbance. The microscopic spores are then inhaled and can trigger respiratory problems such as asthma dust allergies and hay fever. The EnviroVent Wall Mounted Unit draws fresh air into the dwelling from outside and filters it before being delivered into the property. Moisture laden air is diluted, displaced and replaced with clean, tempered and filtered

air. This eliminates or reduces surface condensation, which causes mould growth, providing a significant improvement in the health of asthma sufferers and general indoor air quality.

Life-Cycle Costs



With 5 year on-going warranties and superior long life filters the unit achieves the lowest life-cycle costings. Once installed, there is

no requirement for any maintenance within the first three years, after which the air quality filter should be cleaned or replaced. All other component replacement is carried out simply and quickly by exchanging the consumable items. The worn out components are then taken back to the factory to be recycled thus reducing the impact on landfill and saving millions of pounds in replacement costs.



Pre-Heater and Hours Run Meter

The integral pre-heater is designed to temper the incoming air during periods of low external temperatures. A sensor monitors incoming air and pulses the heater to ensure temperatures are held to pre-set minimums. Three independent safety cut-out devices shut down the heater in the event of fan failure. The heater facility is controlled independently from the fan by a conveniently positioned enable/ disable switch. For monitoring of operational life and verification of usage, an integral Hours Run Meter is fitted.





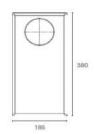




Dimensions (mm)

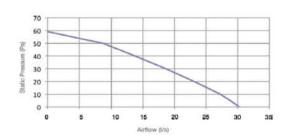






Performance Curve 📀





Options & Ancillaries 🚫



Product o	Description •	EnviroVent Code •	
1	Round Rigid Ducting Ø100	1RD 100 X 2M	
	Louvre Grille Ø100	1MF FIX LOUV	
7	Box Profile	1AC BP	

Technical Specifications (>)



	<19°C (1)	>19°C (2)
Maximum Airflow Vs (m³/h)	26 (93.6)	36 (130)
Maximum Power (W)	10.9	16.0
Maximum Sound Levels dB(A) @ 3m	38.3	-
Speed Settings	4	4

(1) The unit performs in 'condensation control mode' at air temperatures below 19°O (2) The unit performs in energy saving 'heat source mode' at air temperatures above 19°O (optional)

Installation
Full installation guide is enclosed with all products; or sent separately in advance - if required.

Motor Incorporates the Ultra Low Watt DC motor technology with sealed for life ball bearings designed to operate continuously at a pre-set 'background' rate.

Fan Is a 140 X 220mm centre mounted forward curved centrifugal fan.

Filter Is fitted with an integral insect filter.

Servicing / Maintenance
Achieved by remova/exchange/replacement of filters and consumable items. There should be a filter exchange after 24-96 months.

Guarantee Covered by an on-going, repeatable 5 year warranty, subject to the completion of specified maintenance.

Integral 'intelligent Low Temperature' Comfort Heater
Powered by a single supply and capable of holding incoming air temperatures reasonably accurately—around 10°C. The heater element is manufactured in a solid tubular sheath material and not in open wire format.

Accreditations BBA - Certificate No.: 03/4043 CE - EMC Compliance: EEC/89/336 Low Voltage Directive IEC 72/73/EEC



Check out pages 1 and 2 to discover how 'input' ventilation can benefit your home, health and lifestyle.



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Innovation and Excellence in energy efficient ventilation soulutions

Ventac Group
Fitzwilliam House,
Blessington,
Wicklow
t:045 851500
f:045 851501
e:sales@ventac.com

www.ventac.com