

Air Flow Solutions



Expert in Air Movement since 1955



AIRFLOW® 



Why we need to ventilate?

The causes



Airtight Homes

Modern dwellings are designed with increasingly reduced natural air infiltration rates, higher levels of insulation making them almost completely sealed.

Consequently the air inside can become moist, stale and generally stuffy and unpleasant to breathe. As we spend nearly 70% of our time at home we should be looking after our indoor environment better.



Carbon Emissions

Everyone is aware of the need to reduce our carbon footprint. Managing the carbon emissions from dwellings will be the cornerstone of our Building Regulations until we reach carbon zero dwelling.

From appliances to people, carbon dioxide and carbon monoxide is emitted and needs to be curtailed.



Radon

Radon is a naturally occurring, invisible, odourless gas that comes from deposits of uranium in soil, rock, and water. It is harmlessly dispersed in outdoor air, but when trapped in buildings, can be harmful, especially at elevated levels. Some regions of the U.K. are more prone to radon gas than others.



Noise

Many people do not really stop and consider the constant level of sound we are subjected to on a daily basis, but noise is ever present.



Mould

Unchecked levels of moisture (condensation) and relative humidity combined with a suitable organic breeding place such as wood, carpet, wallpaper etc., will inevitably lead to mould growth. Mildew forms in wall cavities and crevices and microscopic mould spores can be inhaled by humans triggering asthma, allergies and skin disorders.



Toxic Gases

A variety of noxious and toxic gases can collect within a dwelling if not properly ventilated. All can have a serious effect on health and well being if not considered as part of a ventilation strategy.



Unhealthy Atmosphere

Indoor climate can be too warm, too cold, too damp, too dry. Combining this with the activity of everyday living and people living together in close proximity produced odours, cooking smells and numerous unhealthy, volatile organic compounds (VOC).



Biological Pollutants

You could be sharing your bed with thousands of dust mites. Bedding and carpets are their home and if your dwelling is overly damp or humid they breed all the more. Dust mites contribute to the increase in asthma, chest infections and allergies and if left unchecked represent a very real health hazard.



Condensation

Dampness is a huge problem in the U.K. Damaging to both humans, and to the fabric of buildings, condensation forms when the temperature of a surface (walls, mirror etc.) is below the dew point of the surrounding air. This leads to streaming windows and walls and ultimately to mould.

Did you know?

81%

of people are at risk from a respiratory or dermatological condition because of poor air quality in their home

58%

of people have experienced mould or condensation in their home

15.3

million homes in the UK are at risk of 'Toxic Home Syndrome'

90%

of our time is spent indoors, where air can be more polluted

900

more chemical, particles and biological materials indoors may affect our health

50%

more pollutants may be found inside your home than outdoors



Residential Extractor Fans

iCON



Stylish, award winning design

- Unique, silent shutter opening
- Axial and mixed flow impellers
- Extraction from 19 l/sec / 68 m³/hr up to 75 l/sec / 270 m³/hr
- 12v dc for extra safe (SELV) low energy ventilation
- Modular design, choose the fan, select the controller
- Choice of basic, timer, humidity, motion sensor
- Coloured cover options available
- Low specific fan power (SFP) meets latest Building Regulations



iCONstant



Continuous ventilation

- Continuous running axial fan
- Trickle flow rates of 6, 8 and 13 l/sec
- Maximum boost flow rate of 20 l/sec
- Control Options: Timer and Humidity
- IPX5 – Install in Zone 1 or 2
- Low SFP complying with current Building Regulations
- SAP Appendix Q eligible
- Low Noise to 10 dB(A)

QuietAir



Hushhh...Its good to be quiet!

- Discreet 100mm, 125mm and 150mm axial, low energy fans
- From 5 watts
- Normal and Power flow settings – 21 l/sec / 75 m³/hr to 72 l/sec / 260 m³/hr
- IP45 - Install in Zone 1 or 2
- Extracts over longer duct lengths
- Whisper Quiet, from 25 dB(A)
- Eco-start option. Two minute delay for quick visits
- Room refresh – programmable routine ventilation every 8, 12, 24 hours
- Low specific fan power (SFP) 0.24 w/l/s well below latest Building Regulations



Aura-eco



Slim profile, simple to fit

- 100mm, 125mm and 150mm axial fans
- Compact styling
- Powerful extraction up to 65 l/sec or 235 m³/hr
- Low watt motor, from 6 watts
- Quiet, from only 29 dB(A)
- Low specific fan power (SFP)

LOOVENT-eco



The next generation...

- 2 speed Centrifugal Fan
- Extract performance up to 31 l/sec or 110 m³/hr
- Economical to operate - from 2.8 watts - low energy DC motor
- Very quiet running fan for its size - from 25.2 dB(A)
- Low SFP - complies with current Building Regulations
- IPX5 - Install in Zone 1 or 2
- Control options: Timer, Humidity Timer and Motion Sensor Timer
- SAP Appendix Q eligible dMEV version available

Mechanical Central Extract Ventilation

Airovent WHV-8



- Simultaneous extraction from multiple rooms
- Helps reduce condensation problems
- Compact size provides space saving solution
- Low noise, long life EC fans
- Remote control version with built-in humidity sensor
- Quick installation with Airflex Pro semi rigid ducting
- SAP Appendix Q eligible and BEST PRACTICE rated

Airovent HVS-10



Mechanical Ventilation with Heat Recovery (Residential)

BASIC LINE

SMALL / MEDIUM DWELLINGS

Duplexvent DV72



- Fits inside a 600mm cupboard or suspended ceiling (DV72)
- Compact design and lightweight, enabling one-man installation
- Over 90% thermal efficiency
- Independently adjustable EC fans with very low specific fan power
- Thermal summer bypass
- Easy filter maintenance via access windows
- In built frost protection facility
- Stylish touch screen panel with advanced controls
- SAP Appendix Q eligible and BEST PRACTICE rated

Duplexvent DV250/300



LARGE DWELLINGS

Duplexvent BV400



- Premium thermal efficiency, 93% and SFP (0.45 W/l/s)
- Easy installation via interchangeable spigots
- Automatic summer bypass and frost protection
- Low noise levels thanks to the innovative fan design
- Self diagnostic feature for ease of servicing
- Tamper proof operation for extra safety
- Optional F7 filters
- Digital control version with data logging capability
- Home automation control via BMS connection
- SAP Appendix Q eligible and BEST PRACTICE rated

Duplexvent DV400



Mechanical Ventilation with Heat Recovery (Residential)

PROFESSIONAL LINE

SMALL / MEDIUM DWELLINGS

Duplexvent DV50



- Low height allows installation above external entry door or in false ceilings
- Easy filter maintenance without entering premises
- Triple filter design with F7 pollen filter
- Multi spigot design reduces duct length
- Over 90% thermal efficiency and low SFP
- Automatic, 100% summer bypass
- New smart frost protection heater
- Built-in electric post-heater
- Optional digital control and BMS connection
- SAP Appendix Q eligible and PASSIVE HOUSE certified



Duplexvent DV80

Duplexvent DV96SE



- Galvanised steel casing with extra insulation
- Triple filter design with F7 pollen filter
- Over 90% thermal efficiency and low specific fan power
- Automatic, 100% summer bypass
- New smart frost protection heater
- Auto cut-off switch for extra safety
- Eight speed remote control with LCD display
- Optional BMS connection (LON / KNX)
- Built-in electric post-heater
- Cooker hood version providing space saving solution
- SAP Appendix Q eligible and PASSIVE HOUSE certified

Duplexvent DV90SCK



LARGER DWELLINGS

Duplexvent DV110SE



- Galvanised steel casing with extra insulation
- Triple filter design with F7 pollen filter
- Over 90% thermal efficiency and low specific fan power
- Automatic, 100% summer bypass
- New smart frost protection heater
- Auto cut-off switch for extra safety
- Eight speed remote control with LCD display
- Optional BMS connection (LON / KNX)
- Built-in electric post-heater
- SAP Appendix Q eligible and PASSIVE HOUSE certified

Duplexvent DV145SE

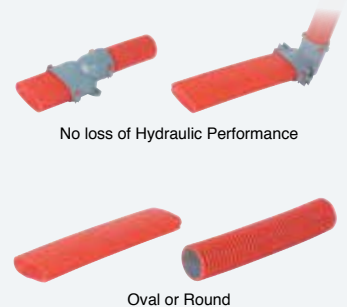


Airflex Ducting Solutions

Airflex Pro



- Zero leakage ensures highest performance
- 70% time saving on installation
- Interchangeable duct system (75mm round / 51mm oval) without any hydraulic pressure loss
- Compact, suits narrow joists and low ceiling voids
- Durable with high crush ability (13 kN/m²)
- Very low noise transmission between rooms
- Easy cleaning through access panels
- Smooth bore with anti-static and anti-bacterial lining
- SAP Appendix Q eligible



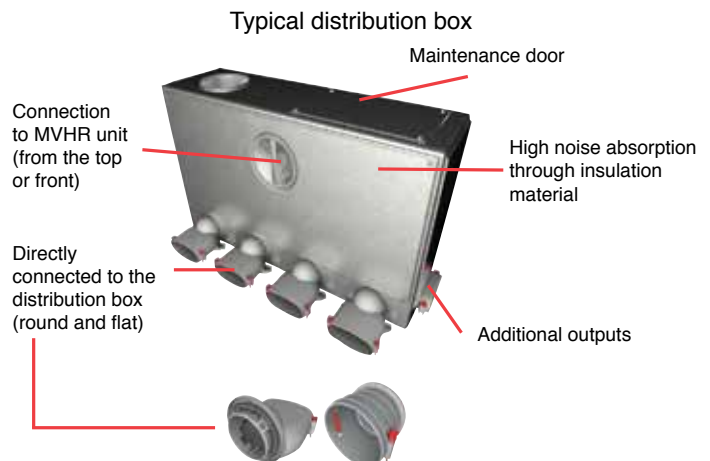
Mix and Match, “Oval or Round” = No loss of Performance

A quick and easy to fit system of semi-rigid ducting that can result in up to 70% time saving during the on-site installation process, compared to rigid or spiral duct methods. This innovative system uses low resistance and antibacterial smooth round and oval tubes which connect each room to the heat recovery unit via an air distribution box.

The Airflex Pro Oval ducting is designed to equal the Hydraulic Performance of Airflex Pro Round so both types can be used within the same system without a loss of performance.



Oval pipes going through the floor, round pipes up the wall



Airflex Retro



- Designed for Renovation Projects
- Installation in 3 steps makes renovation easy
- 40% saving on installation time
- Award winning valves with integrated filters
- Components available with stucco profile
- Can be painted to suit with inside walls
- No need for suspended ceiling to hide the ducting system



Step 1



Step 2



Step 3

No need for a suspended ceiling to hide the ducting system

Retro ducting, is designed as a “coving” system which lends itself to apartments / houses with a standard footprint building design - ideally comprising a common entrance hallway with all rooms emanating from the hallway.

Industrial Centrifugal Fans



EC Single and EC Double Inlet Fans



- Highly efficient EC motor driven centrifugal fans.
- Energy savings of up to 80% over induction motor type units.
- Reduced size and lower motor noise.
- Typical bearing life up to 25,000 hours.
- Galvanised steel, powder coated fan cases.
- Airflows up to 1200 l/sec.
- Pressures up to 700Pa.



Single Inlet Fans



- AC fans to provide airflows from 5.1 l/sec to 128 l/sec with pressures up to 500Pa.
- Proven forward curved, centrifugal impeller technology gives quiet compact performance.

Double Inlet Fans



- Large air volume, low velocity design and a wide range of applications.
- Motor noise and mechanical vibration is reduced by a patented three point motor mount.
- Fan speeds can be controlled by voltage variation giving total flexibility.

Duplex Fans



- Twin scroll fan is two aluminum impellers mounted on a centrally located, double shaft AC motor.
- Design provides airflow across a broad front.
- Supplied with an engineered mounting plate for fan stability and easy mounting.
- Airflows up to 151 l/sec. Ideal for cooling applications.

Hot Fans



- Direct drive fans to handle hot air or the products of combustion up to 250°C.
- Intermediate cooling impeller (an Airflow pioneering design) eliminates the problem of short motor / bearing life at these temperatures.
- Range from 62 l/sec upwards.

Flue Gas Dilution Fans



- Avoid the use of unsightly and expensive flues.
- Products of combustion are dispersed at low level with CO₂ content 1% or less.
- Aluzinc coated mild steel painted black, or stainless steel (316 Grade), known as the SSDF range, for enhanced corrosion resistance.
- Available in 5 sizes. Up to 650Kw (2.2m Btu)



Mechanical Ventilation with Heat Recovery (Commercial)

FLEXI LINE



LIGHT COMMERCIAL APPLICATIONS

Duplexvent DV1100/DV1600

Duplexvent DV2600/DV3600



- Largest PASSIVE HOUSE certified commercial range
- Excellent thermal efficiency exceeds 90%
- Low energy EC fans
- Versatile unit positioning (vertical / horizontal)
- 10 speed digital control with BMS
- Internet connection with user / service interfaces
- Constant flow / pressure control with zonal ventilation
- Off the shelf delivery



MULTI LINE

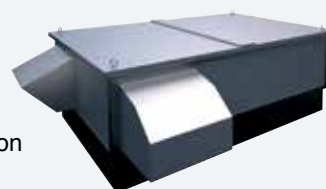
COMMERCIAL APPLICATIONS

Duplexvent DV500-DV8000

Duplexvent DV1500-DV8000N



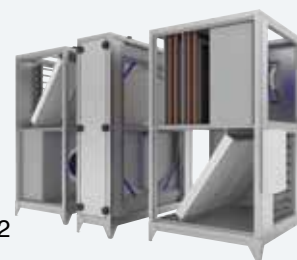
- Bespoke unit design to match specification requirements
- High thermal efficiency via counter-flow heat exchanger
- Internet connection with user / service interfaces
- Built-in heating and cooling options
- 10 speed digital control with BMS
- Mixing chamber for indoor temperature / humidity regulation
- Constant flow / pressure control with zonal ventilation
- Optional outdoor versions available



Duplexvent Rotary



- Air volume from 8000 to 16000 m³/hr
- Easy assembly – each unit delivered in 3 parts
- Customised units with a choice of duct orientations
- Indoor or rooftop versions
- Low SFP, high static pressure, high efficiency EC fans
- Excellent heat recovery efficiency, up to 85%
- Thermal rotary wheel heat exchanger
- Double skin construction, 45mm mineral wool to class T2, TB2
- BMS protocols: Modbus, TCP, (KNX, BACnet optional)
- VDI 6022, PassivHaus and Eurovent certification pending



RESIDENTIAL FANS



HEAT RECOVERY



INDUSTRIAL FANS



ACCESSORIES

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