VENTILATION SOLUTIONS FOR SOCIAL HOUSING

HELPING TO CREATE HEALTHY, ENERGY EFFICIENT HOMES

AIRFLOW®

MORE THAN 70 YEARS OF EXPERIENCE

Founded in 1955, Airflow has grown from one man's expertise in fan design and air flow measurement into a thriving international group. Renowned for its innovative approach to new product development and air movement techniques, Airflow can offer you a variety of ventilation solutions to suit your needs.

With headquarters in High Wycombe, where the business was founded, Airflow has subsidiaries in Germany and the Czech Republic and has global distributors from Norway to New Zealand.

Airflow's knowledgeable and committed staff continually develop new and innovative products that raise standards and provide long term, reliable ventilation solutions.

UNITED KINGDOM
High Wycombe (Head Office)

Our founder started the business in 1955, just one mile from the current site, which has been Airflow's headquarters since 1960, co-ordinating our global activities.

GERMANY

Airflow has been serving ventilation products and air measurement devices to the German and European markets for over 50 years. Operating near Cologne, Airflow Germany has their own customer service, sales and after sales team.

CZECH REPUBLIC

Founded in Prague over 20 years ago, the Airflow Czech Republic team offer sales and servicing of ventilation products for the Eastern European market.

HEALTHY HOMES THROUGH EFFECTIVE VENTILATION

Meeting Today's Social Housing Standards

Social housing providers face increasing responsibilities to deliver homes that are safe, healthy, energy efficient and compliant with current regulations.

The introduction of Awaab's Law and the Social Housing (Regulation) Act has strengthened the requirement for landlords to identify, investigate and resolve damp and mould hazards promptly, ensuring residents are protected from conditions that could harm their health and wellbeing.

WHY VENTILATION MATTERS

As homes become more energy efficient through improved insulation and airtightness, the risk of condensation, damp, mould growth and poor indoor air quality can increase if ventilation is not properly considered.

EFFECTIVE VENTILATION IS ESSENTIAL TO:

- Control moisture and condensation -

- Prevent damp and mould growth -

- Improve indoor air quality -

- Remove pollutants and excess humidity -

- Support occupant health and wellbeing -

- PAS 2035 and Retrofit Compliance -

Government-funded retrofit projects must comply with PAS 2035, which adopts a whole-house approach to improving building performance.

A key requirement of PAS 2035 is the assessment and provision of suitable ventilation. Existing systems must be evaluated and upgraded where necessary to ensure homes remain healthy, comfortable and compliant following energy efficiency improvements.

SUPPORTING SAFE, HEALTHY AND SUSTAINABLE HOMES

Effective ventilation plays a critical role in helping social housing providers meet their obligations, protect residents and maintain building performance.

By taking a proactive approach to moisture management and indoor air quality, landlords can reduce the risk of damp and mould, support regulatory compliance and create healthier homes for the future.

LANDLORD RESPONSIBILITIES

Providing safe, healthy homes is a fundamental responsibility for all social housing providers.

Under Awaab's Law, the Social Housing (Regulation) Act 2023 and the Homes (Fitness for Human Habitation) Act, landlords are expected to take a proactive approach to identifying and resolving damp, mould and ventilation-related issues before they affect residents' health and wellbeing.

Effective management of moisture, condensation and indoor air quality is now a key part of maintaining compliant, healthy homes.

FROM COMPLIANCE TO PREVENTION

Today's housing standards place greater emphasis on prevention rather than reactive repairs.

Landlords are expected to understand the condition of their housing stock, assess moisture and ventilation risks, and take appropriate action before problems escalate. Effective ventilation plays a vital role in reducing the likelihood of damp, mould and poor indoor air quality while helping to protect both residents and the building fabric.

A proactive approach can help reduce complaints, minimise maintenance costs and improve resident satisfaction.

DELIVERING BEST PRACTICE

PAS 2035 requires ventilation to be considered as part of any whole-house retrofit strategy, ensuring energy efficiency improvements do not create unintended moisture or air quality issues.

By working with competent contractors and ensuring ventilation systems are properly assessed, installed and maintained, landlords can demonstrate compliance, manage risk and create safer, healthier and more sustainable homes for residents.

Effective ventilation is not simply a compliance requirement - it is an essential part of delivering quality housing and protecting resident wellbeing.

SOLUTIONS AVAILABLE TO MEET THE BUILDING REGULATIONS

Intermittent extractor fans – designed more with budget in mind than performance

Intermittent extractor fans – designed with performance and style in mind as well as reducing heat loss and backdraught

Intermittent extractor fans – designed to perform and be Quiet using a small amount of energy, the quietest fan available that performs (beware of silent imitations)

Constant trickle fans – Choices available for through the wall or challenging duct runs

Heat recovery ventilation – solutions from single room units to whole house units, and can be used in conjunction with extractor fans

Retro - ducting means you can have central extraction without the need to conceal the ducting

If the dwelling does not have space for a central unit then Airflow manufacturers a unit that can go above your hob and also carry out the function of a cooker hood

AIR ACADEMY & TRAINING CENTRE

Airflow is proud to welcome customers to the state-of-the-art Air Academy training facility at the Airflow UK Head office in High Wycombe.

This 500m² facility is designed to educate, inform and inspire all visitors. More than just an experience centre, the Air Academy is an elite training facility that is able to offer CIBSE approved CPD seminars.

One of our experts will happily provide you with a tour of the academy which showcases Airflow's wide range of innovative products. You'll be guided through the history of ventilation and be able to see the first inclined manometer to go into commercial production, as well as the first Internet-controllable MVHR units in the UK.

To arrange a visit to the Air Academy, please contact your Account Manager or alternatively contact Airflow on: **+44 (0)1494 525252** or e-mail **info@airflow.com**.

TRAINING SERVICES

Airflow offers on-demand CPD sessions for architects, specifiers, and M&E consultants at the Air Academy or a location of your choice. These sessions can also be hosted online. Scan the QR code to find out more and to book onto one of these highly popular sessions at a date, time and location convenient to you.

CIBSE APPROVED CPD

Book your CPD

Understanding UK Building Regulations Relating to:

1. Residential Mechanical Ventilation with Heat Recovery.
2. Mechanical Ventilation with Heat Recovery for Commercial Applications.
3. Residential & Commercial MVHR with integrated Cooling.

Residential MVHR CIBSE CPD Course

Commercial MVHR CIBSE CPD Course

Residential & Commercial MVHR with Integrated Cooling CIBSE CPD Course

RESPONSIBLE MANUFACTURING

ISO 9001 Quality Matters

Airflow is dedicated to delivering innovative, high-quality products with in-built reliability and proudly holds the ISO 9001:2015 certification.This ensures that every product we produce is rigorously tested and meets stringent international standards, assuring our customers of its long-lasting durability over years of operation.

ISO 14001 Environmental Matters

Airflow is dedicated to minimising its environmental impact and has successfully achieved the ISO 14001:2015 certification. This reflects our ongoing commitment to enhancing operational efficiency while reducing energy consumption, waste, and overall resource usage.

Airflow's Sustainability Journey

2020-2025

- Installed 108-panel solar PV system
- Added thermodynamic panels for water heating
- Implemented air-source heat pump
- 90% of company fleet now hybrid/electric
- Installed 6 EV charging stations
- Upgraded to motion-sensor LED lights
- Switched to electric forklifts
- Transitioned to 100% renewable electricity tariff

2025-2030

- Measured our operational (Scope 1 & 2) and partial supply chain (Scope 3) emissions
- Boosting sustainability awareness with training programs
- Measure complete supply chain (Scope 3) emissions
- Achieve zero waste to landfill
- Collaborate with supply chain to reduce emissions
- Transition to 100% electric fleet
- Increase recycled content in products and packaging
- Establish clear, science-based net zero targets

COMPLIANCE

BIM Airflow products are provided in BIM file format. Other formats ie: DWG, RFA are also available.

ErP Airflow manufactures ErP compliant fans and ventilation systems; ensuring that you are receiving energy efficient ventilation systems that perform.

WEEE Airflow Developments Ltd is registered under the Waste Electronic and Electrical Equipment (WEEE) Directive scheme.

IP Ratings Our fans are designed to meet international Ingress Protection (IP) ratings. These ratings use two numerical classifications, one for water protection and the other for dust protection.

SAP The SAP assessment incentivises low carbon developments. To help developers achieve their SAP assessment, Airflow offers a number of products and accessories with SAP eligibility.

Passive House In a drive to reduce energy consumption, Airflow produces a large range of residential and commercial MVHR units with Passive House certification. This certification means that the units use minimal energy and help to reduce energy consumption, heat loss and energy bills of the building.

Quiet Mark Airflow offer Quiet Mark approved fans. Quiet Mark approval means that the fan is extremely quiet but does not compromise on performance when in operation.

Building Regulations All of our products comply with the current Building Regulations Approved Document F Volumes 1 and 2: Ventilation (England and Wales) and Approved Document L: Volumes 1 and 2: Conservation of fuel and power. Airflow's products also comply with Scottish Building Standards, Technical Handbook 2015 for Domestic and Non-Domestic Applications, Standard 3.14 and Building Regulations (Northern Ireland) 2014, Part K.

WORKING TOGETHER

By working with professional organisations, Airflow is committed to improving the standards of regulations, product design, performance and on-site installation of ventilation products.

Building Research Establishment (BRE) is an independent organisation that is dedicated to improving the built environment and implementation of the Building Regulations.

The British Electrotechnical and Allied Manufacturers Association (BEAMA) has a specialist ventilation group that promotes best practice and installation, product specification and Building Regulations.

New London Architecture (NLA) is an independent information resource and discussion forum focused on London's built environment.

Fan Manufacturers Association (FMA) focuses on influencing and monitoring commercial and industrial fan regulations.

European Ventilation Industry Association (EVIA) assists in drafting regulations and promotes best practice.

The Residential Ventilation Association (RVA) provides a technical overview of regulations and advises on the Building Regulations.

The Kitchen Bathroom Bedroom Specialists Association (KBSA) promotes best practice kitchen, bedroom and bathroom design, which includes ventilation.

Federation of Environmental Trade Associations (FETA) represents the ventilation industry to European, U.K. governmental and regulatory bodies.

HEVAC represents the building services sector and emphasises in improving product performance and client awareness of ventilation.

TÜV is a European technical certification body that independently assesses products to EN308 standard.

VTT is a Finnish certification body that assesses products on their annual efficiency and SFP.

The Passive House Institute is an independent German research organisation that developed the Passive House standard and promotes its global adoption.

The Passivhaus Trust advocates the adoption of the Passive House standard in the U.K.

BSRIA provides specialist support for design, construction, facilities management, product testing and market intelligence in the construction and building services industry.

WHY WE NEED TO VENTILATE

AIRTIGHT HOMES

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

Consequently, the air inside your home can become moist, stale, generally stuffy and unpleasant to breathe. As we spend nearly 90% of our time indoors, we should be looking after our indoor air quality and environment much better.

CONDENSATION

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

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 a carbon zero dwelling.

The use of low energy motors without compromising on performance is one of Airflow's contributions towards creating a carbon friendly environment.

MOULD

Unchecked levels of moisture and relative humidity combined with a suitable organic breeding place such as wood, carpet or wallpaper, will lead to mould growth. Mildew forms in the wall cavities and crevices and its microscopic mould spores can be inhaled. Inhaling these spores can trigger asthma, allergies and skin disorders, so extracting moist air is important.

TOXIC GASES

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

NOISE

Many people don't stop to consider the constant level of sound that they are subjected to on a daily basis.

Often it is subliminal but it remains ever present. Noise affects our nervous system and, in extreme cases, our well-being. Specifying quieter ventilation products and radial duct work, which doesn't transmit noise between rooms, contributes to a quieter indoor environment. Airflow has worked hard to reduce the noise levels on our fans without affecting their performance. Our Quiet Mark approved fans, are proof of our continuing efforts in this area.

RESIDENTIAL EXTRACTOR FANS

Background Ventilation and Intermittent Fans

iCON®

- 3 model range with flow rate up to 84 l/s (302 m³/h)
- Timer, Humidity Timer and Motion Sensor ‘snap-in’ modules available
- Ductable for short runs
- Can be surface mounted or recessed
- Red Dot Design Award winning silent iris shutter prevents backdraughts
- A range of coloured covers available
- IPX4 rating
- SELV versions available
- 3 year warranty

iCONsmart

- 2 model range with flow rate up to 34 l/s (122 m³/h)
- Multi-function micro modules available for additional functionality
- Ductable for short runs
- Quiet Mark Certified with noise levels from 23.5 dB(A)
- Bluetooth controlled via myAirflow app
- IPX5 rating
- 5 year warranty

QuietAir™

- 4 model fan range with flow rate up to 72 l/s (259 m³/h)
- Timer, Humidity Timer, Motion Sensor and Variable Speed Control versions available
- Quiet Mark Certified with noise levels from 25 dB(A)
- Very low SFP and power consumption
- Long-life ball bearings with approx. 40,000 h life
- IP45 rating
- QT100 model available in black
- 3 year warranty

Aventa In-Line

- 3 model range with flow rate up to 144 l/s (520 m³/h)
- Basic and Timer versions available
- In-line mixed flow fans with 2 speed operation
- High pressure, low noise levels
- Available as a shower kit with optional LED light
- Access to motor and impeller without dismantling ducting
- IPX4 rating
- 3 year warranty

Aria

- Entry level 100mm axial fan with flow rate up to 18.5 l/s (67 m³/h)
- Basic, Timer, Humidity Timer and Motion Sensor Timer versions available
- Low noise levels from 26 dB(A)
- Can be ceiling and wall mounted
- IPX4 rating
- 2 year warranty

LOOVENT

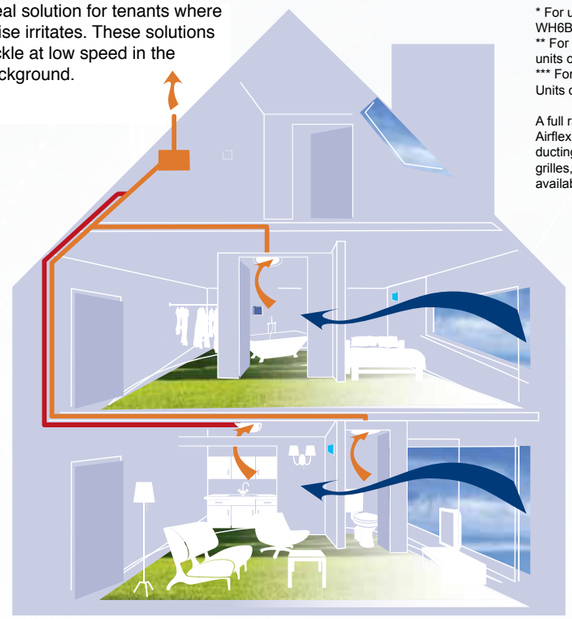
- 2 speed filterless centrifugal fan with flow rate up to 31l/s (110 m³/h)
- Timer, Humidity Timer and Motion Sensor Timer versions available
- Economical to operate
- Can be surface mounted or recessed in portrait or landscape
- IPX5 rating
- SELV versions available
- 5 year warranty

RESIDENTIAL EXTRACTION SOLUTIONS

Centralised Continuous Mechanical Ventilation

A typical central extract system (fig A)

Ideal solution for tenants where noise irritates. These solutions trickle at low speed in the background.



* For use with both WH4B & WH6B units
** For use with MEV WH6B units only
*** For use with WH4H RF Units only

A full range of rigid ducting, AirflexPro (semi-rigid) ducting, flexible ducting, grilles, and fittings are available at www.airflow.com

TOP TIPS

- Easy to install using 75 mm diameter Semi Rigid ducting to retro-fit your dwelling.
- New Builds with a high level of air tightness benefit by extracting a smaller amount of air continuously more often.
- Continuously running fans are virtually silent on trickle and use little energy.

FIG A - Illustrates a typical central extract system using rigid ducting, focusing on “Best Practice” that the toilet extract is separate to, or positioned in-line between the kitchen extract and the extraction unit.

- AirflexPro compatible units available, utilise the 75 mm AirflexPro with Airovent specific units

Airovent MEV WH6B

- 3 unit range offering Whole House ventilation from a central location
- Flow rate up to 83-139 l/s (299-500 m³/h)
- All units use efficient Electrically Commutated (EC) motors
- Basic, Timer, Humidity controls
- Complies with Building Regulations and ErP
- 3 year warranty

Airovent MEV WH4B

The **AIROVENT MEV WH4B** unit is smaller in size than the WH4H unit with slightly less open airflow capabilities.

The unit is controlled by using three position switches to switch between the low, medium, and high fan speeds. An alternative is to use a humidity sensing switches Both switches offered need to be hard wired into the fan unit.

The **AIROVENT MEV WH6B** unit is fitted with a six port back-box instead of the standard four port offered with the WH4B model.

This small change makes the unit suitable for use with Airflow`s AirflexPro 75 mm, semi-rigid, low energy, radial duct system.

Airovent RF MEV WH4H

The **AIROVENT RF MEV WH4H** unit comes complete with built-in humidistat to adjust airflows. It can be paired with two types of stylish wireless controllers.

The port connections on this unit are 125 mm diameter to the rooms and a choice of 125 mm or 160 mm to outside.

RESIDENTIAL EXTRACTOR FANS

Decentralised Continuous Mechanical Ventilation

iCONstant™ data

KEY BENEFITS

- **Real-time data insights** straight to our portal
- **No external sensor** or monitoring device required in the property
- **Monitoring of fan** performance & environmental conditions
- **Data empowers landlords** to make smart & fast decisions
- **Compliance with the** requirements of Awaab's Law
- **Properties at risk of damp and mould** identified ahead of issue occurring
- **No need for** Wi-Fi or internet connection

- Continuous running fan
- Selectable trickle flow rates 18 / 29 / 40 / 47 / 58 m^3/h with boost up to 72 m^3/h (20 l/s)
- Ultra-quiet in operation from 15.4dB(A)
- Very low running cost
- IPX5 – Install in Zone 1 and 2
- Intelligent humidity sensor and run on timer
- Two minute delay start (boost) option
- Data monitoring
- Memory/data retained in event of a power cut
- 5 year warranty

Introducing the latest innovation in ventilation intelligence: iCONstant data, a powerful new ventilation solution designed to transform how social landlords monitor and manage indoor air quality.

Seamlessly integrated with a datalogging platform, the iCONstant data continuous extract fan can provide real-time insights into fan performance and environmental conditions across housing portfolios, without the need for an external sensor or monitoring device within the property.

This enhanced visibility enables proactive maintenance, supports compliance, and helps ensure healthier living environments for residents, empowering landlords with the data they need to make smarter, faster decisions.

LOOVENT dMEV

- Continuously running centrifugal fan
- 2 speed ventilation – flow rate up to 31 l/s (110 m^3/h)
- Can be surface mounted or recessed in portrait or landscape
- Timer, Humidity Timer controls
- SELV versions available
- IPX5 rating. Complies with Building Regulations, ErP and SAP eligible
- 5 year warranty

iCONstant™

- Continuously running fan
- Quiet when in operation from 10dB(A)
- Flow rate up to 20 l/s (72 m^3/h)
- Timer, Humidity Timer controls
- Guaranteed constant volume feature
- dMEV fan with IPX5 rating for walls and ceilings
- Complies with Building Regulations, ErP and SAP eligible
- 3 year warranty

iCONstant™ flex

- Continuously running fan
- Selectable trickle flow rates 18 / 29 / 40 / 47 / 58 m^3/h with boost up to 72 m^3/h (20 l/s)
- Ultra-quiet in operation from 15.4dB(A)
- Very low running cost
- IPX5 – Install in Zone 1 and 2
- Two minute delay start (boost) option
- Timer and Humidity versions
- Memory retained in event of a power cut
- 3 year warranty

RESIDENTIAL MECHANICAL VENTILATION WITH HEAT RECOVERY (MVHR)

DV65

Entro-V

- For use in dwellings up to 116 m^2
- Flow rate up to 67 l/s (242 m^3/h) at 100 Pa
- Over 85% thermal efficiency
- Double Coarse 55% (G4) filter design with an optional ePM1 60% (F7) supply air filter
- Automatic, 100% summer bypass
- Complies with Building Regulations, ErP and SAP recognised
- Choice of spigot locations (top entry as standard)
- Also available as part of the DV65 Entro-V MVHR Kit (part no: 90001654) which provides a complete ventilation system ready for install
- 2 year warranty*

DV82

Entro-V

- For use in dwellings up to 184 m^2
- Flow rate up to 83 l/s (300 m^3/h) at 100 Pa
- Over 85% thermal efficiency
- Double Coarse 55% (G4) filter design with an optional ePM1 60% (F7) supply air filter
- Automatic, 100% summer bypass
- Complies with Building Regulations, ErP and SAP recognised
- Choice of spigot locations (top entry as standard)
- Also available as part of the DV82 Entro-V MVHR Kit (part no: 90001655) which provides a complete ventilation system ready for install
- 2 year warranty*

DV130

Entro-V

- For use in dwellings up to 277 m^2
- Flow rate up to 128 l/s (460 m^3/h) at 100 Pa
- Over 85% thermal efficiency
- Double Coarse 55% (G4) filter design with an optional ePM1 60% (F7) supply air filter
- Automatic, 100% summer bypass
- Complies with Building Regulations, ErP and SAP recognised
- Choice of spigot locations (top entry as standard)
- Also available as part of the DV130 Entro-V MVHR Kit (part no: 90001656) which provides a complete ventilation system ready for install
- 2 year warranty*

DV65 Kit

Entro V DV65 Kit

Kit suitable for a dwelling floor area up to 116 m^2 (242 m^3/h) (complete in 2 pallets)

Shrink wrap ready to be delivered

All components inside the red ducting coils

DV82 Kit

Entro V DV82 Kit

Kit suitable for a dwelling floor area up to 184 m^2 (300 m^3/h) (complete in 2 pallets)

Shrink wrap ready to be delivered

All components inside the red ducting coils

DV130 Kit

Entro V DV130 Kit

Kit suitable for a dwelling floor area up to 227 m^2 (460 m^3/h) (complete in 2 pallets)

Shrink wrap ready to be delivered

All components inside the red ducting coils

MECHANICAL EXTRACT VENTILATION WITH HEAT RECOVERY (MVHR)

Single unit solution

Mechanical Ventilation with Heat Recovery (MVHR) systems continuously remove stale, moisture-laden air from a property while supplying fresh, filtered air from outside.

As the stale air is extracted, its heat is recovered and transferred to the incoming fresh air. This provides a constant supply of tempered fresh air, helping to improve indoor air quality, reduce condensation and support energy efficiency.

There are various solutions available:

Decentralised MVHR Units

Single room MVHR units are installed directly within individual rooms and are ideal for both new-build and retrofit applications.

They can be used in wet rooms such as bathrooms, en-suites, kitchens and utility rooms as well as habitable rooms including bedrooms, living rooms, dining rooms and home offices.

When specifying single room units, considerations include available background ventilation and the requirement for installation on an external wall.

Whole House Solutions

In properties where installing a centralised MVHR system is impractical, multiple single room units can be paired together to create an effective whole-house ventilation strategy.

This approach is particularly well suited to retrofit projects where space constraints or building layouts make traditional ducted systems difficult to install.

Centralised MVHR Systems

Centralised MVHR systems provide a whole-house ventilation solution from a single unit. Fresh air is supplied and stale air extracted throughout the property via a network of ducts, delivering balanced ventilation to every room.

These systems are ideal where sufficient space is available and can offer high levels of ventilation performance and heat recovery efficiency.

Multi room extraction with Heat Recovery

Decentralised Mechanical Ventilation with Heat Recovery

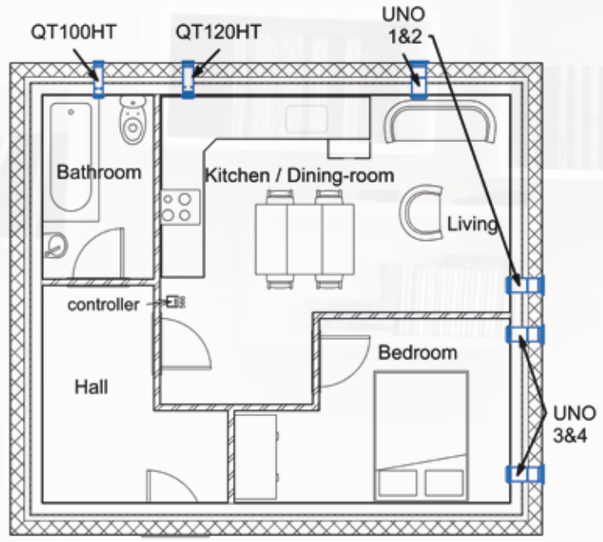
GERMAN DESIGN AWARD SPECIAL 2016

Uno*hab*

- Lots of flexibility with low noise levels
- EC motors and built-in filter
- Can be connected to other units to provide total house solution
- Can be connected to extractor fans in wet rooms to ensure correct air volumes of air are supplied when fans are in use
- Systems can be designed to meet Part F in Building Regulations
- Can be installed in retrofit or new build
- Used in multiple occupancy properties
- Ideal for use in multiple occupancy properties
- Suitable for various wall depths
- 2 year warranty*

MVHR SINGLE DWELLING UNIT EXAMPLES

1 bed maisonette



Two examples of where UNO has been used to provide an MVHR solution to a total dwelling.

They have been combined with QuietAir to provide a total system, so that the corresct extraction rates are achieved to meet building regulations.

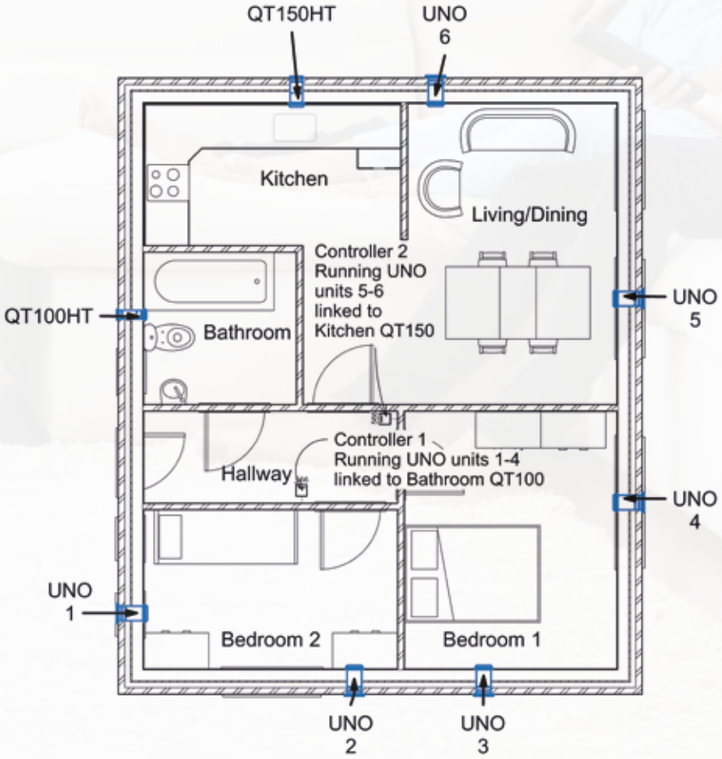
By using a control unit the UNO*hab* units communicate with the QuietAir extractor fans. When the QuietAir is activated in the wetrooms, the UNO*hab* switches to supply air only, ensuring there is enough replacement air entering the dwelling so the moist humid air can be removed.

KEY

UNO

QuietAir

2 bed maisonette



Centralised MVHR Systems

A Ventilation Unit with a Cooker Hood - Small Apartment Solution

Adroit™

Combines ventilation and extraction of cooking odours in the kitchen

- Flow rate up to 47 l/s (170 m³/h) at 100 Pa
- Up to 84% thermal efficiency
- Full heat recovery for whole dwelling
- Recovers heat from the hob
- Slim and stylish extractor hood
- Internet control
- Integrated into the kitchen unit
- 5 years warranty*

*excludes motors. Motor warranty one year from date of purchase.

Adroit DV50 / DV80 Horizontal MVHR Space-Saving Units

Adroit™

- Suitable for dwellings up to 120m²
- Flow rate up to 93 l/s (225 m³/h) at 100 Pa
- Up to 90% thermal efficiency
- Remote “on the go” Internet and BMS control available
- Unique triple filter facility including an ePM1 50% (F7) pollen filter
- Available in left and right-hand models
- Complies with Building Regulations, SAP recognised, ErP and Passive House Institute certified when fitted with integral electric heater
- Integral carbon dioxide and humidity sensors as standard
- 5 year warranty*

EASILY ACCESSED FROM OUTSIDE THE PROPERTY

The Adroit has been designed to fit within a ceiling void. This means that Landlords can protect their investment by insuring planned maintenance from outside the dwelling. This preserves the building fabric, ensures occupier wellbeing and saves energy without the need to access the property or disturb the tenant.

*excludes motors. Motor warranty one year from date of purchase.

Adroit DV51 / DV96 / DV110 / DV145 / DV245 Vertical MVHR Units

THE ENERGY SAVING AWARDS 2024 PROUD WINNER 2024

Adroit™

- Range suitable for dwellings up to 400 m²
- Flow rate up to 271 l/s (976 m³/h) at 100 Pa
- Up to 92% thermal efficiency and low SFP
- Remote “on the go” Internet and BMS control available
- Unique triple filter facility including an ePM1 50% (F7) pollen filter
- Range available in left and right-hand models
- Complies with Building Regulations, SAP recognised, ErP and Passive House Institute certified when fitted with integral electric heater
- 5 year warranty*

*excludes motors. Motor warranty one year from date of purchase.

Remove harmful incoming pollutants

Inner city solutions - High efficiency NO_x filters

Nitrogen Oxide (NOx) pollution, with other chemicals is linked to 40,000 premature UK deaths a year and is particularly prevalent in areas with heavy traffic such as industrial areas, busy roads and outside schools.

If you are living in a built-up area, it is important to ensure that you incorporate a NOx filtration system as part of your wider ventilation system.

Airflow’s NOx filtration system works in conjunction with the unit’s air filters to remove harmful air pollutants from the incoming air before it is distributed around the dwelling.

By ensuring that the incoming air is at healthy levels, you ensure that health and well-being of those inside is protected as well as improving persons concentration levels.

- Filters particulate matter and gases to remove pollutants prior to the air entering buildings
- Additional filtration system above the air filters within the MVHR unit
- Filters up to 90% of harmful NOx particles out the incoming air
- Improves the indoor air quality
- Variety of sizes available to fit your MVHR unit

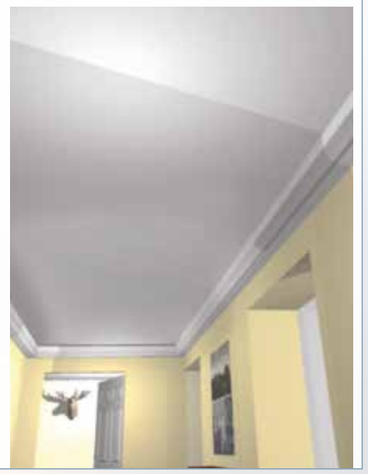
Retro ducting system

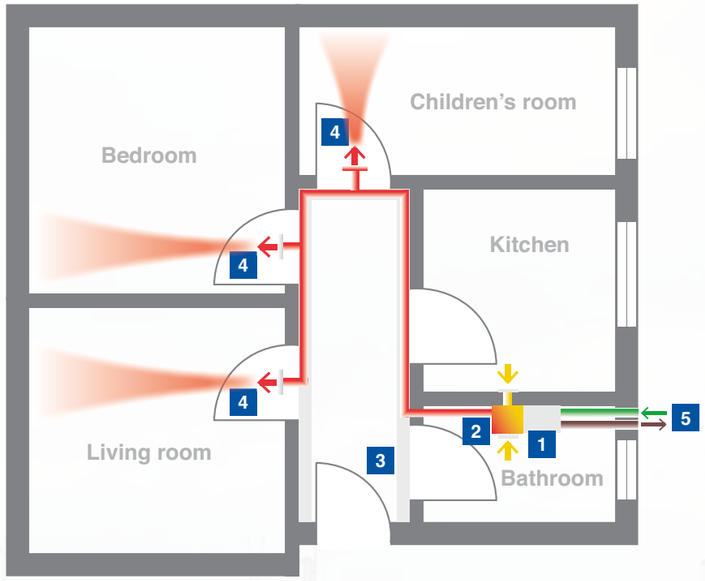
This versatile and innovative ducting is designed around a coving system that can be incorporated within the visible part of the house or flat and is ideally suited to a standard footprint building design where there is a common entrance hallway with all the rooms branching off the hallway.

Retro ducting is lightweight, versatile and easy to fit making it the perfect choice for a discreet coving ducting application. This system can be used for System 4 (Mechanical Ventilation with Heat Recovery) in a supply and extract function and also System 3 (Mechanical Extract Ventilation) as an extract only duct system.

Discreet coving air ducting ideal for renovations

- Discreet, quick to install air ducting for MVHR systems
- Designed for both new build and renovation projects
- Easy installation in 3 steps
- Coanda effect supply valves enable good circulation without the need for longer ducts
- Suitable for standard footprint building design
- Can be painted to suit inside décor of dwelling
- Negates the need for suspended ceiling to hide the ducting system
- Fire retardant to eu-b2 rating DIN 4102





= Supply Air to habital rooms
= Extracted Air from wet rooms
= Intake Air from outside
= Exhaust Air to outside

1. MVHR unit
2. Distribution box
3. Retro ducting
4. Coanda valves above door
5. Intake and extract

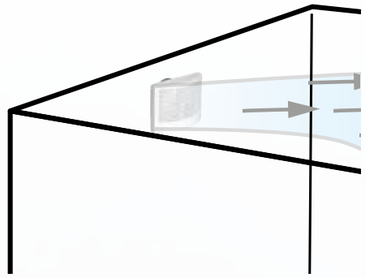
So easy to fit

Step 1

Step 2

Step 3

Coanda Air Valve - Works well with Retro ducting

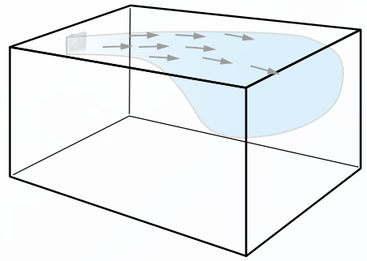


When coanda valves are used with Airflex Retro, it removes the need for the valves to be located in the corner of the room. Therefore making installation that much easier.

Coanda valves supply air into a habitable room more effectively than conventional air valves. By directing a low pressure jet of air from a high level valve the air flow attaches itself to the ceiling and remains attached for a longer distance, thereby increasing the "throw" of the valve.

Using Coanda valves enable a greater more even distribution of air throughout the room having more positive effect on the internal atmosphere.

Coanda Valves can also be used as conventional extract valves for whole house balanced ventilation systems.



AIRFLEXPRO

Semi rigid ducting

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 or ventilation unit via an air distribution box.

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

Semi rigid ducting without joints. Performance data is now recognised by the U.K. Government as an input for Standard Assessment Procedure (SAP) calculations via SAP eligible.

Mix and Match, "Oval or Round" = No Loss of Performance

- Zero leakage ensures highest performance
- Fire rated to EN13501-1 Class E
- 70% time saving on installation
- Interchangeable ducting system (75 mm round / 51 mm x 114 mm oval) without any hydraulic pressure loss
- Compact, suits narrow joists and low ceiling voids
- Durable with high crushability (10kN/m^2)
- Smooth bore with antistatic and antibacterial lining
- Easy to clean when installed
- SAP eligible ducting (non-jointed)

AirflexPro Round

AirflexPro Oval

Loovent

The Powerful Performer

5 YEAR Warranty

The 4th generation of the Million Plus selling Loovent extractor fan. With a pedigree of proven reliability and outstanding performance it really is a fan for all applications.

Intermittent
Loovent T

PULLCORD · TIMER · TWO SPEED · DELAY START 2 MINS

Loovent HT

PULLCORD · TIMER · TWO SPEED · DELAY START 2 MINS · HUMIDITY

Loovent MST

PULLCORD · TIMER · TWO SPEED · DELAY START 2 MINS · MOTION SENSOR

Intermittent SELV
Loovent SELV

PULLCORD · TIMER · TWO SPEED · DELAY START 2 MINS · SELV

Loovent SELV HT

PULLCORD · TIMER · TWO SPEED · DELAY START 2 MINS · SELV · HUMIDITY

Continuous dMEV
Loovent dMEV T

PULLCORD · TIMER · TWO SPEED · CV CONTINUOUS VENTILATION

Loovent dMEV HT

PULLCORD · TIMER · TWO SPEED · CV CONTINUOUS VENTILATION · HUMIDITY

Continuous SELV dMEV
Loovent SELV dMEV T

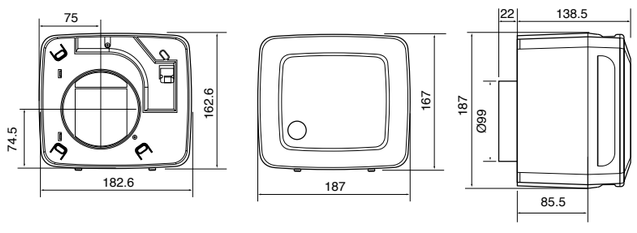
PULLCORD · TIMER · TWO SPEED · CV CONTINUOUS VENTILATION · SELV

Loovent SELV dMEV HT

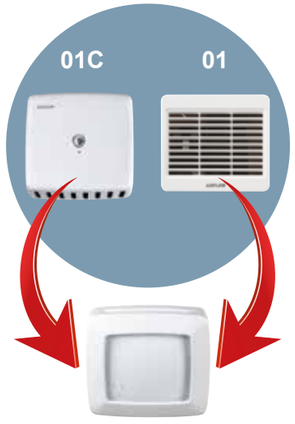
PULLCORD · TIMER · TWO SPEED · DELAY START 2 MINS · SELV · HUMIDITY

Why Choose Loovent?

- Two speed - intermittent & continuous models
- Longer lengths of ducting no problem. Delivers 15 l/s through 6 m of flexible duct
- Sound pressure levels as low as 25 dB(A) at normal operation
- For New Build and Social Housing upgrades
- Energy efficient DC motor, from just 2.8 W standard
- Surface or recessed, portrait or landscape, wall or cavity
- IPX5 rating for both wall and ceiling install
- The smallest footprint in its class
- Quick and easy to install, proven over four decades
- Fast to fit and interchangeable with older versions of Loovent 01C and 01 Fans, same mounting holes and outlet position
- At least 40,000 hours constant operation
- No noise magnetic anti-backdraught flap
- Anti-strangle pull cord, electrical cut out when cover removed
- Made of 100% recyclable materials
- Complies with latest Building Regulations requirements
- 5 year warranty



Suitable for New Build and an easy upgrade from old Loovent models



- Same mounting holes
- Same outlet position

Bezel available for neat finish

AIRFLOW®

NOT ALL SYSTEMS ARE AS EFFECTIVE

Considering Positive Input Ventilation (PIV)?

A system originally developed in the 1970's for leaky Victorian houses continues to be chosen as a "Quick Fix" for some Social Housing upgrades.

However, as new homes are built to a better standard and renovations include significant insulation, there are few factors to be considered.

Perception can be misleading

The actual drawbacks of PIV are that the air displacement principle can only work on leaky buildings as there is little control over where the air goes.

Not as suitable for well insulated new build properties where there are definitely fewer leakage paths.

Poorly insulated ceilings allow humid air to rise into the loft space, which means the damp air is re-circulated again.

Much loft space air is not "fresh" as it is subject to other airborne construction material contaminants.

Difficult access to filter for routine cleaning / replacement. In tenant properties they will never do it, so is there a landlord replacement schedule?

To avoid frost damage to the unit and to warm up in cold air in an uninsulated loft space in winter, a costly (24 / 7) electric heater is used warm up incoming cold air.

If a heater is not used, cool air (i.e. a draught) is forced into the hallway / stairs dropping the temperature in those areas.

Noisy. The joist mounted fan is a short distance from the ceiling input diffuser. Transfer grilles may be needed in doors to rooms which do not open directly on to the hallway.

Older properties won't have been built with a 10mm gap undercut to internal doors. Consequently air circulation, condensation, dampness and mould issues are not addressed in these rooms.

Possible noise / vibration issues from units screwed to ceiling joists. Unit runs continually so creating a constant sound.

Is the loft space really a source of ventilation air you want to use? Relying on an air filter to condition contaminated air seems dubious.

More critically

PIV forces damp, moist air into the fabric of the building through the wall sockets, into wooden windows, through vents and gaps in the floor boards, contaminating plaster and insulation materials with humid air.

When an occupant opens a window they will create a path of least resistance nullifying the positive pressure in the dwelling which the device is designed to maintain and thereby creating a condition where the damp, moist air in the wet rooms will not be removed.

- But how do you measure the effective circulation of a device which blows air into a leaky dwelling? Without a whole house leakage test who knows how much the dwelling is leaking?
- Approved extract systems 1,2,3 and 4 can be accurately measured with a Powered Flow Hood to determine air flow rates. Drawing air from a loft space and pumping it into a dwelling which may not have open path ways (ie: undercuts to doors)to the wet rooms and then relying on the moist air to leach out of cracks or vents in the dwelling is much more difficult and adds a huge element of uncertainty.

Does it work?

PIV is not recognised as one of the four primary approved ventilation systems by the Building Regulations, Approved Document F1, 2010 (amended 2013) Means of Ventilation. In fact this methodology was removed from the Building Regulations Approved Document F list of approved systems in 2006 because of doubts about its effectiveness and performance issues.

- Introduces loft air into the dwelling.
- Positively pressurises the inside of the dwelling to create air or circulation by forcing damp air to escape through existing gaps,vents,floorboards,windows and cracks.
- Condensation is supposedly eliminated as the damp, moist indoor environment is reduced with filtered (but hardly fresh) air from the loft.

How do you test the efficiency of a PIV installation?

- The Building Regulations require that 'notifiable work' ie: repairs, maintenance and upgrades/improvement that require planning permission require sign off by Building Control. Similar to new build installations, prescribed ventilation rates as documented in Building Regulations Approved Document F and are required to be measured, recorded and submitted to the local authority Building Control.

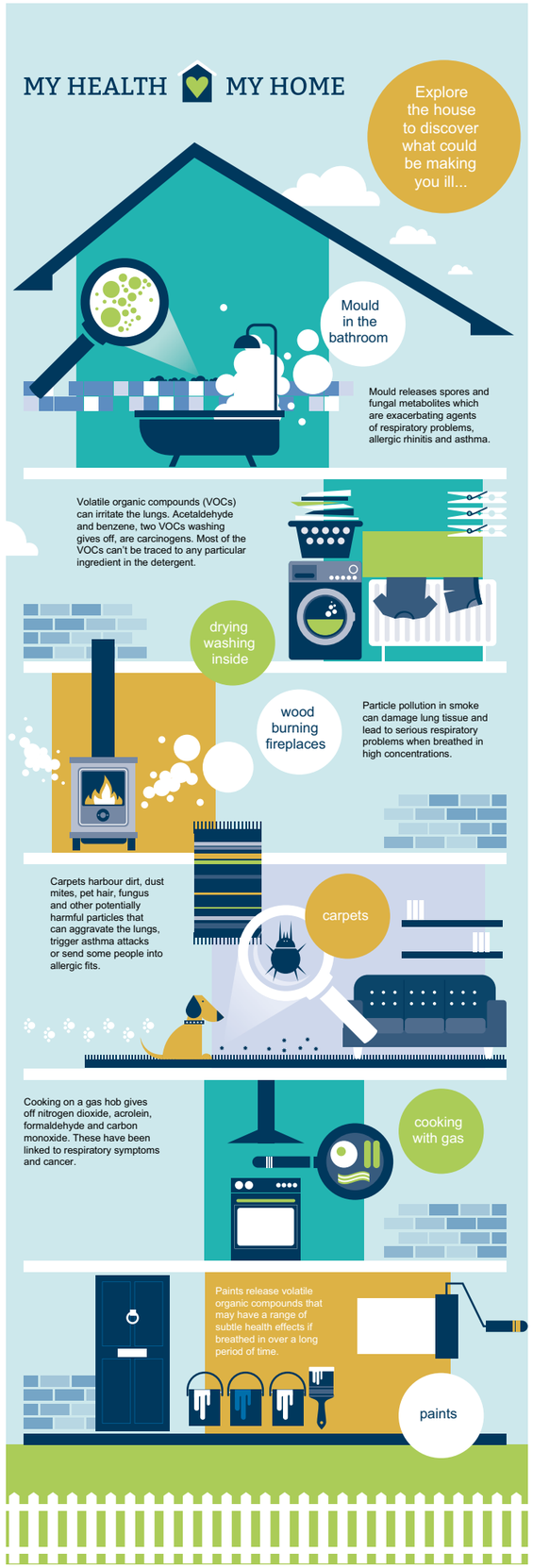
VENTILATION MATTERS

Protect the health of your tenants and the fabric of your property

Damp and mould are no longer just maintenance issues, they are critical health and compliance concerns. Effective ventilation helps protect residents, improve indoor air quality and safeguard property assets. Our range of reliable, low-maintenance ventilation solutions supports social housing providers in creating healthier homes and meeting today's housing standards.

www.airflow.com

AIRFLOW®



EXPERT ADVICE

Peter Howarth, Professor of Allergy and Respiratory medicine at Southampton University, calls for increased awareness of what is being termed 'Toxic Home Syndrome'.

"Toxic Home Syndrome occurs when individuals and families are exposed to a potent mix of airborne pollutants within the home arising from poor ventilation, causing respiratory and skin diseases to occur more frequently.

I have had many patients come to me with serious respiratory conditions due to pollutants within the home. With respect to asthma, mould allergy is recognised to be associated with worse asthma and poorer asthma control. The presence of moulds within the home is a reflection of poor ventilation and increased humidity. Homes with mould are also likely to have higher house dust mite allergen levels and this may worsen both respiratory and skin conditions. The lack of adequate ventilation within the home can also be associated with the build up of non-allergenic noxious fumes which are detrimental to health."

THE EFFECTS OF POOR VENTILATION

- Nearly 90% of asthma sufferers are allergic to allergy DER P1 which is present in House Dust Mite droppings
- HDM require high humidity - typically over 70% to live and reproduce

It is clear that lowering humidity levels will help to keep HDM colonies in-check and thereby reduce the incidence of asthma attacks

WHY DO WE NEED VENTILATION?

Ventilation is required for...

- Provision of fresh air for breathing
- Dilution and / or removal of airborne pollutants and odours
- Controlling excess humidity arising from water vapour in the indoor air
- Provision of air required by fuel burning appliances

MOISTURE PRODUCTION?

A family of 4 produces up to 14 litres (24 pints) of moisture per day:

- Bathing & Showering
- Washing & Drying
- Cooking
- Breathing

PRODUCT SUPPORT

Fan selection software

SELECTair

airflowselectair.co.uk

Airflow Selectair selection software allows the user to select products from our Domestic, Commercial and Industrial fan ranges and also select from our Heat Recovery range suitable for their application. The software is hosted within the Airflow website.

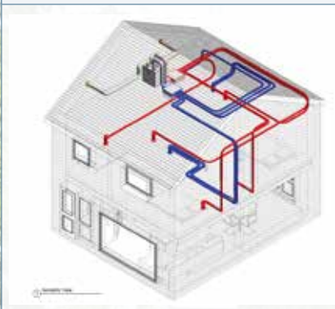
Selectair software has been designed to ensure that products are selected to fulfill the requirements of your application. By following a logical and easy to use sequence fans are listed which are suitable for the room of your choice, through the wall or ducted installation and the type of ducting you will be using.

By automatically calculating the pressure drop values for your requirement, a choice of products are linked to ensure “installed performance” criteria is met. This gives the specifier the confidence to know that choosing a fan from the products offered will deliver the performance expected to meet the latest building regulations for fast, effective ventilation.

Technical

We have a fully trained technical team in our UK head office and in the field, that can provide assistance and application advice on all ventilation matters. From choosing a residential extract fan to specifying a commercial MVHR system.

System design



If you are considering specifying a ventilation system why not send us your drawings. We can advise on the most suitable product complete with compatible accessories to ensure an effective installation.

Send your drawings to: **technical@airflow.com**

BIM

We also have product data in industry leading format for those designers using BIM software, so that all information is available in one file.

Airflow’s BIM models adhere to criteria required by the following BIM standards: IFC, COBie, RIBA, CIBSE

Airflow also provides you with bespoke information not covered by these standards, such as ErP data and whether a product is Passivhaus approved.

Airflow’s BIM models are compatible with Revit 2024 and newer. The models are available Revit 2024 as standard and will automatically upgrade to the user’s version of Revit upon first use.

airflow.com/BIM

FIELD SUPPORT

Field support

Airflow do not view our customers just as a short term arrangement. We believe that by working together in partnership we can achieve better results in realising our shared objectives to deliver efficient, effective and reliable ventilation solutions so that you and your tenants are living in a healthy environment.

Our knowledgeable, trained technicians can provide support to ensure your ventilation projects run smoothly and where issues arise they can advise on the most suitable course of action to provide a successful outcome.

Airflow offers full field support across the UK, our after sales team can deal with any post sale needs and requirements. For any pre sale needs and requirements then our technical sales team can assist.

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