

VENTILATION SOLUTIONS FOR EXISTING DWELLINGS



A ventilation manufacturer with unrivalled choice and service

► Nuaire is the UK leader in the design and manufacture of fans and ventilation systems. We put our energy into efficient ventilation so you don't waste yours.

Based in South Wales, our factory covers over 25,000m³, allowing us to manufacture a wide variety of ventilation products from raw materials to finished goods.

We source almost all of our components from the UK, keeping both our carbon footprint to a minimum and ensuring industry-leading delivery times to customers.

Since our inception in 1966, Nuaire have pioneered a number of ventilation strategies and products widely adopted by the industry, from the twin fan to the Opus residential fans through to the invention of Positive Input Ventilation.



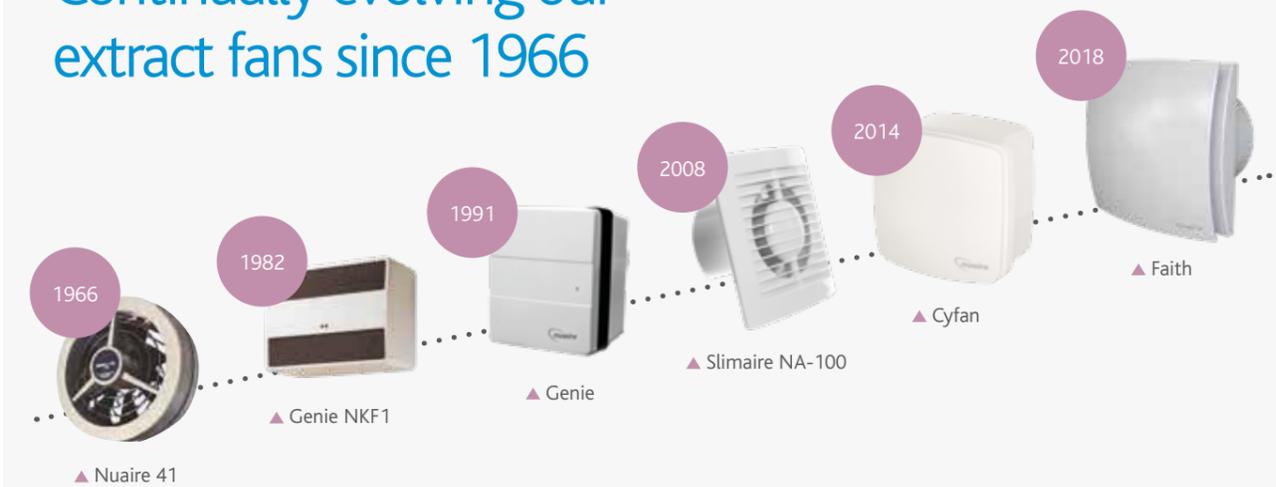
The latest technology for PIV; low watt heaters and wireless controls

Market leader in PIV since invention; our PIV history

► Nuaire invented Positive Input Ventilation (PIV) in 1972



Continually evolving our extract fans since 1966



A fast growing problem

- ▶ External and internal pollutants can have a significant impact on the quality of air in every home and consequently on occupants' health.

Poor ventilation is a wide-scale problem. It is estimated that one in five UK households are poorly ventilated, leading to problems with streaming windows, mould growth and poor indoor air quality.

Condensation dampness is the major indoor air pollutant caused by modern living. Energy-efficiency measures such as cavity wall insulation and double-glazing make homes warmer by sealing in the heat. But as a result, the humid, stale air becomes trapped inside the home leading to condensation and the appearance of black mould.

Through everyday life (cooking, cleaning, breathing) the average family produces over 17 pints of moisture a day. Condensation forms when this moisture comes into contact with cold surfaces within the home. This condensation will lead to mould growth, which is not only unpleasant but is damaging to the fabric of the building and creates unnecessary costs for the registered landlord in decoration and maintenance.

Effects on health

Poor indoor air quality has significant impact on the health and wellbeing of occupants. Studies have firmly linked poor indoor air

quality with a range of undesirable illnesses, such as allergic and asthma symptoms, airborne respiratory infections, and even lung cancer and stroke.

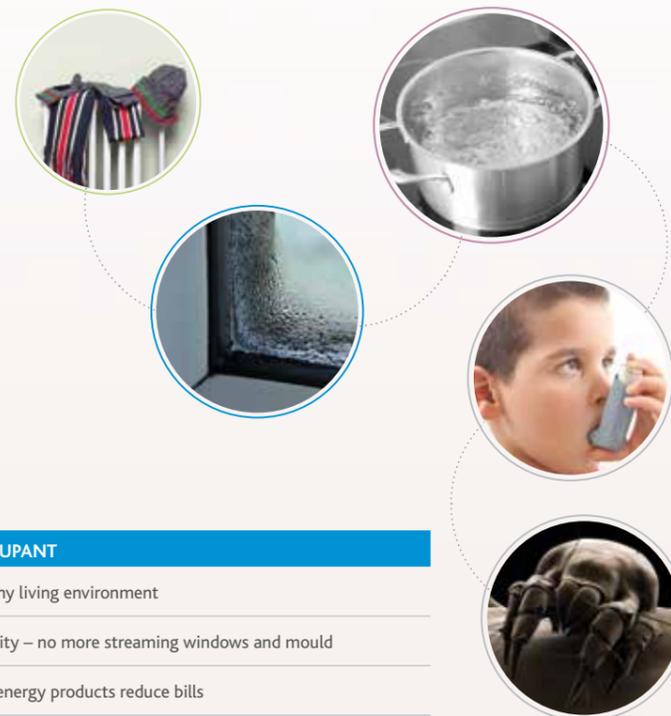
The importance of good ventilation

Ventilation is critical to home comfort and improved health. Adequate ventilation improves air quality and rids the home of air pollutants. It controls the moisture levels in the home, preventing condensation dampness and black mould from forming.

These factors combine to enhance the comfort and indoor air quality of the home and ensure a healthy environment. Effective ventilation also contributes to preserving the structural integrity of the home, reducing maintenance costs and adding to the home's value.

On average, occupants spend over 80% of their time indoors so indoor air quality matters.

ACTIVITY	PINTS OF MOISTURE	
Cooking with Gas		5.2
Clothes Washing and Drying		5.1
Showering		1.6
Breathing (4 people)		5.6
DAILY TOTAL		17.5



Benefits to providing adequate ventilation

FOR THE LANDLORD	FOR THE OCCUPANT
Compliance to ADF and ADL Building regulations	Creates a healthy living environment
Easy Installations	Controls humidity – no more streaming windows and mould
Low life-cycle costs	Extremely low energy products reduce bills
Preserves the building fabric (reducing maintenance costs)	Low noise levels
Maintains long tenancies	Minimal maintenance
Improves tenant wellbeing and health, avoiding legal claims	Addresses harmful indoor air pollutants such as VOCs and Radon gas

How can Nuaire help you?

- ▶ As the **UK's leading ventilation provider** we understand your requirements and have staff on hand to help.

Our offices in South Wales manage schedules, orders and can help on technical enquiries. With over 65 external sales staff we are always on hand to help with product information, training or best practice advice.

Full ventilation training

If you have a DLO, or subcontract your ventilation installers, Nuaire offers free ventilation training that is BPEC and NICEIC accredited. As active members of numerous industry bodies, Nuaire promotes best ventilation installation practice. As fabric improvements and insulation schemes have been commonplace for many years, it's important to review ventilation when refurbishment occurs.

A comprehensive range of products

Nuaire offers a wide range of ventilation products. For renovation of existing buildings, we offer a wide range of axial and centrifugal fans. We also offer 'twin fans' solutions for central ventilation on tower blocks. For planned maintenance on newer homes, we also offer our MEV/MVHR range of fans and spares.



Contact your local rep for free

seminars on condensation and mould

- ▶ Condensation workshops
- ▶ Toolbox talk on regulations
- ▶ Upkeep and maintenance for MEV and MVHR
- ▶ Custom CPD's on request



INTERMITTENT EXTRACT FANS (SYSTEM 1) AND CONTINUOUS RUNNING EXTRACT FANS (SYSTEM 3)

▶ A common, cost-effective way to ventilate houses with extract fans. With a fan per 'wet room' (bathroom, en-suite, kitchen and utility room), extract fans can either be intermittent or continuously running.

▼ Extract + dMEV How do they work?



Nuaire offer

on regulations and different system types

Intermittent extract fans

Extract fans are fitted to a property's 'wet rooms' to provide extraction of moisture and other pollutants. They operate intermittently either through automatic, or occupant control, with replacement fresh air provided through background ventilators.

Choosing the right fan

Product	Product name	Product code	Page number	Axial	Centrifugal	Mixed flow	Continuous	Intermittent	230V	SELV	IPX4	Wall	Ceiling	Window	Maximum Duty
	CYFAN	CYFAN	14	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	60 l/s
New	FAITH	FAITH	15		✓	✓		✓	✓	✓	✓	✓	✓	✓	26 l/s
	iSense	iSense	16	✓		✓		✓		✓	✓	✓	✓	✓	25 l/s
	NA-E	NA-E-100	18	✓				✓	✓	✓	✓	✓	✓	✓	25 l/s
	NA-E	NA-E-150	18	✓				✓	✓	✓	✓	✓	✓	✓	60 l/s
	NA	NA100	18	✓			✓	✓	✓	✓	✓	✓	✓	✓	25 l/s
	NA	NA150	18	✓			✓	✓		✓	✓	✓	✓	✓	60 l/s

EXTRACT FANS SYSTEM 1 AND 3

Cyfan

Your one fan fits all solution!



- ▶ Cyfan offers Social Housing Providers and Installers a sleek and compact fan with unique intelligence and the capability to accommodate different property layouts and tenants lifestyles with just one ventilation solution.

Cyfan allows installers to configure the fan to either continuous or intermittent operation, 230V or 24V SELV, with selected flow and boost rates ensuring the right fan for the application is installed. Furthermore, you only need to stock one fan, providing one perfect solution.

Designed with tenants in mind:

- ▶ Quiet running
- ▶ Compact and aesthetically pleasing
- ▶ Low energy usage; low running cost
- ▶ Easy filterless maintenance

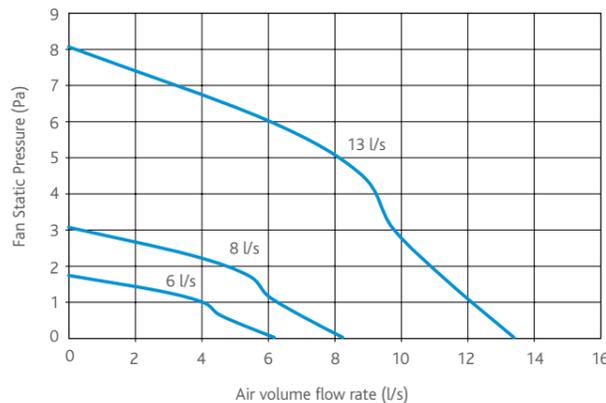
Features and Benefits

- ▶ Suitable for kitchens, bathrooms, WC or utility rooms
- ▶ Recess kit and window kit available
- ▶ Side spigot option allows multi adjoining wet-room ventilation
- ▶ Run on timer for boost functionality
- ▶ Daily run monitoring device
- ▶ Can be configured to continuous or intermittent operation
- ▶ Simple conversion from 230V to low voltage for relevant splash zones
- ▶ Low maintenance and life cycle costs
- ▶ 5 years' warranty*

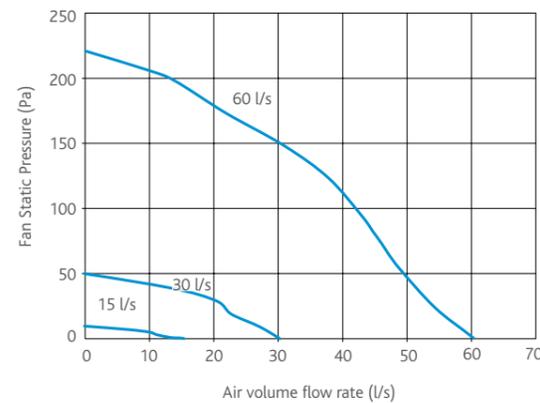
Extract Ventilation Rates - ADF Paragraph 5.1a

Room	Intermittent extract	Continuous extract
	Minimum rate	Minimum high rate
Kitchen	30 l/s adjacent to hob, or 60 l/s elsewhere	13 l/s
Utility room	30 l/s	8 l/s
Bathroom	15 l/s	8 l/s
Sanitary accommodation	6 l/s	6 l/s

Cyfan - Continuous Performance



Cyfan - Intermittent Performance



* 1 year parts and labour, remaining years parts only

EXTRACT FANS SYSTEM 3

Faith

Smart Technology

New



New locking facility

- ▶ The Faith extract fan has been specifically designed to meet the requirements of Social Housing. Compact and filterless, this continuously-running fan provides energy-efficient ventilation and comfort for your tenants.

With the well-being of your tenants in mind, Faith's technology delivers continuous ventilation and maintains the correct amount of airflow, providing a healthy living environment.

Using the latest technology, Faith offers a daily run monitor as standard to enable landlords to monitor operational use.

Faith is a continuously-running extract fan that has been designed with the DLO or contractor in mind offering ease of install with a simple and quick set-up.

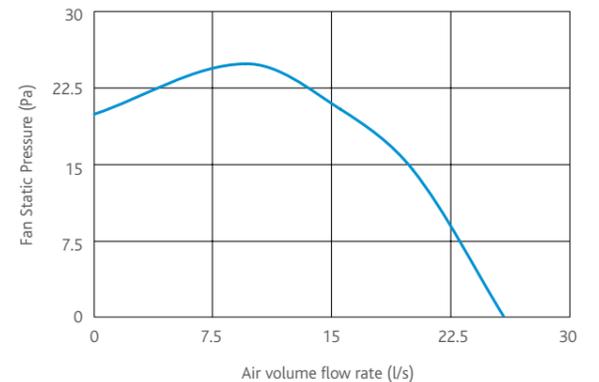
Features and Benefits

- ▶ Night time delay and intelligent run-on timer – saves energy and prevents noise disturbance
- ▶ Intelligent and energy-saving humidity tracker – slowly boosts the fan by measuring humidity levels
- ▶ Low maintenance and life cycle costs – cost-effective ventilation solution
- ▶ Daily run monitor – records tenants' operation
- ▶ Wall, ceiling and window mounted – fits every application
- ▶ Quiet and unobtrusive – tenant acceptability
- ▶ 230V and SELV versions
- ▶ IPX4 – suitable for all zones
- ▶ 5 years' warranty*

Extract Ventilation Rates - ADF Paragraph 5.1a

Room	Continuous extract
	Minimum high rate
Kitchen	13 l/s
Utility room	8 l/s
Bathroom	8 l/s
Sanitary accommodation	6 l/s

Faith - Air Performance



* 1 year parts and labour, remaining years parts only

EXTRACT FANS SYSTEM 3

iSense (dMEV)

SAP PCDB listed

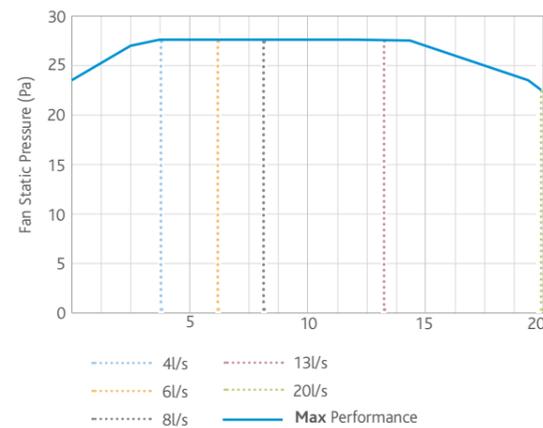


iSense is a compact and stylish, continuous running ventilation solution designed to meet system 3 Part F & L building regulations for all wet room applications. Its intelligent and smart technology has constant flow operation, ensuring the set desired flow is delivered to provide a healthy living environment for the occupants.

Features and Benefits

- ▶ SAP PCDB listed – SFP down to 0.13 w/l/s
- ▶ Part F (system 3) & Part L Compliance
- ▶ Simple set up and commissioning
- ▶ Designed to ultra low noise levels
- ▶ Constant flow operation – ensuring desired airflow is delivered
- ▶ Effective technology – to create a healthy living environment
- ▶ 3 minute night time delay – saves energy and prevents noise disturbance
- ▶ Intelligent run-on timer – operates to the users lifestyle via 'auto' mode or fully adjustable
- ▶ Standard and humidistat models
- ▶ IPX4 rated
- ▶ 5 year warranty*

iSense - Air Performance



Tested through the wall with 300mm rigid duct and a low resistance grille.

SAP PCDB Table

Unit configuration	Location	iSense SFP Rigid duct	iSense SFP Flexi duct
Thru wall	Kitchen	0.13	0.15
Thru wall	Wet room	0.15	0.20
In-room	Kitchen	0.20	0.20
In-room	Wet room	0.19	0.24

Product Codes

iSense
Standard model
iSense-HT
Humidistat model

EXTRACT FANS SYSTEM 1 AND 3

Domestic axial fans

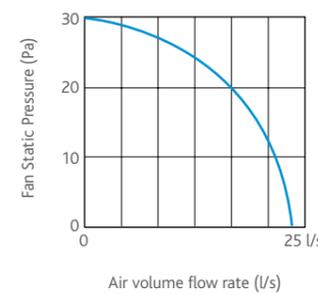
Low-energy single and twin speed axial fans

Nuaire's latest range of axial fans are a simple and cost-effective ventilation solution for houses and apartments. This range is ideal for air-extraction in bathrooms and toilets, as well as utility rooms and kitchens.

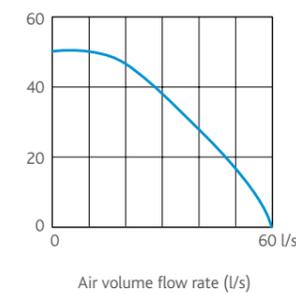
Suitable to extract stale air directly to the outside or through short length ducting, the units can be wall/panel, ceiling and window mounted.



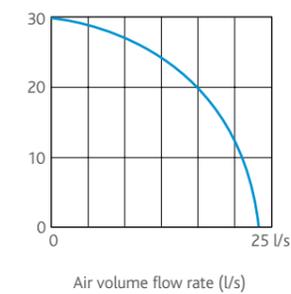
NA-E-100 Performance



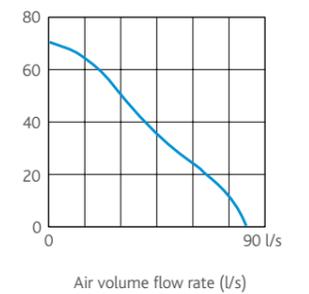
NA-E-150 Performance



NA-100 Performance



NA-150 Performance



Code	Single speed	Twin speed	4"	6"	Pull cord	Timer	Humidistat	SELV	230V	Window mounted
NA-E-100	✓		✓						✓	
NA-E-100H	✓		✓			✓	✓		✓	
NA-E-100HPC	✓		✓		✓	✓	✓		✓	
NA-E-100PC	✓		✓		✓				✓	
NA-E-100T	✓		✓			✓			✓	
NA-E-100-12	✓		✓					✓		
NA-E-100H-12	✓		✓			✓	✓	✓		
NA-E-100HPC-12	✓		✓		✓	✓	✓	✓		
NA-E-100PC-12	✓		✓		✓			✓		
NA-E-100T-12	✓		✓			✓		✓		
NA-E-150	✓			✓					✓	
NA-E-150T	✓			✓		✓			✓	
NA-E-150PC	✓			✓	✓				✓	
NA-E-150H	✓			✓		✓	✓		✓	
NA 100XPC		✓	✓		✓				✓	✓
NA 100XPC-12		✓	✓		✓			✓		✓
NA 150XPC		✓		✓	✓				✓	✓

TWIN FAN OPTIONS FOR TOWER AND MULTI OCCUPANCY BUILDINGS

PROVIDING VENTILATION 24/7

Repair and replacement for tower blocks



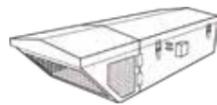
▲ Airevolve

► Nuair offer a wide range of commercial ventilation solutions, some of which are suitable for existing residential dwellings. In many inner city locations, high rise buildings are ventilated with 'Twin Fans' where a central system is positioned on a roof.

Airevolve twin fan (up to 0.18 m³/s)



▲ AVT Internal In-line Twin Fans



▲ AVT-R External In-line Twin Fans with grille outlet

▼ Side discharge grille

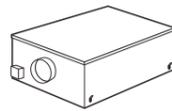


▲ Quietscroll

Quietscroll twin fan (up to 4.5 m³/s)



▲ EST Internal in-line twin fans



▲ EST-X External in-line twin fans



▲ EST-R Roof mounted twin fans with end inlet and side discharge

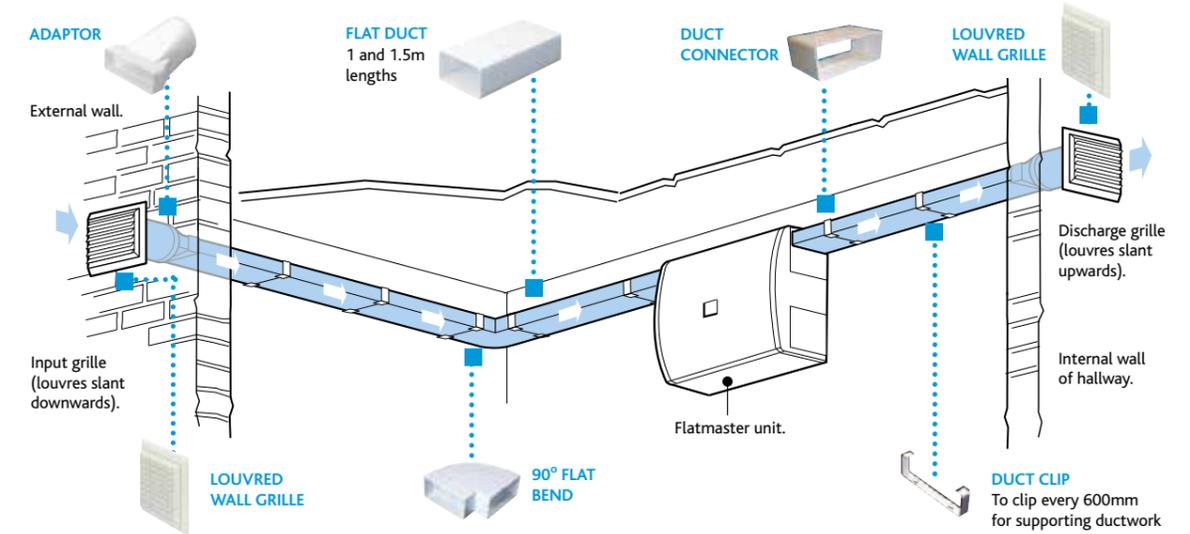


▲ EST-B Roof mounted twin fans with bottom inlet and side discharge



FAN ANCILLARIES

FLATMASTER ANCILLARIES



Adaptor

PVC470WH – Rectangular to round duct 121 x 60mm/100mm dia.



Duct Connector

PVC420WH – 121 x 60mm



Louvred Wall Grille

PVC104LR – 100mm dia. spigot Low resistance



Flat Duct

• PVC4015WH – 121 x 60mm 1m and 1.5m lengths
• PVC4010WH – 1m lengths



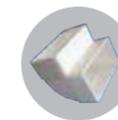
90° Flat Bend

PVC450WH – 121 x 60mm



Duct Clip

PVC422WH – 121 x 60mm



90° Vertical Bend

PVC460WH – 121 x 60mm



Duct Connector

PVC493WH – 100mm dia.



Round Duct Pipe

• PVC1200-4WH – 100mm dia. 2m length
• PVC1100-4WH – 1m lengths



90° Bend

PVC490WH – 100mm dia.



Duct Clip

PVC496WH – Pipe hanger 100mm dia.



Round Wall Grille

PVC104-CNFS – 100mm dia. spigo

DUCTING ANCILLARIES AND FIRE PRODUCTS



Duct Accessories

- PVCSEAL – Ducting sealant
- PVC50TP45 – Aluminium Duct Tape 45m
- PVCSEAL – Intumescent Duct Sealant



Circular Fire Damper

- CFD-100-E60S – 100mm
- CFD-125-E60S – 125mm
- CFD-160-E60S – 160mm



Circular Fire Damper Air Valve

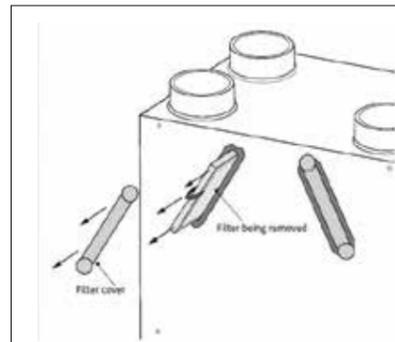
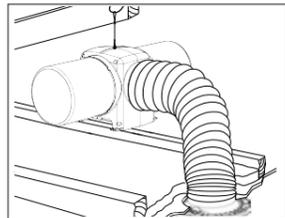
- V-FD100-E60S – 100mm
- V-FD125-E60S – 125mm, Wall mount only
- V-FD125-125 – 125mm, Ceiling mount only



Fire Wrap

- FW110X54T – 110 x 54mm Firemm Damper
- FW204X60T – 204 x 60mm Fire Damper
- FW220X90T – 220 x 90mm Fire Damper
- PVC488T – 100mm Fire Damper
- PVC588T – 125mm Fire Damper
- PVC688T – 150mm Fire Damper

SPARE FILTERS FOR DRI-ECO, FLATMASTER, MEV & MVHR



FLAT-FILTERKIT



MVHR-WM2-FILTERKIT/ MVHR-WH1-FILTERKIT/ MVHR-WH2-FILTERKIT/ MVHR-ECO2-FILTERKIT



DRIPOS2001-FILTERKIT / DRI-ECO FILTERKIT



MVHR-WH1-FILTERKIT/ MVHR-ECO3-FILTERKIT



MEV-G2-FILTERKIT



MVHR-WH1-FILTERKIT/ MVHR-ECO4-FILTERKIT

INDOOR AIR QUALITY (IAQ)

AND OUR P.I.V SOLUTION

Indoor Air Quality (IAQ) is the quality of the air you breathe in your home. **How clean is the air within your home?**

Poor indoor air quality, or indoor air pollution, occurs when there is a build up of pollutants in the home to the extent that it affects an occupant's health and comfort.

WHAT YOU CAN DO NOW

- ✓ IAQ can be managed and kept at a healthy level by reducing the number of pollutants in the home
- ✓ Ensure your home is properly ventilated; ventilation is installed, well maintained and switched on
- ✓ Reduce levels of moisture by drying clothes outside, covering pans when cooking, ensuring extraction fans are switched on in the bathroom and kitchen and shutting the bathroom door when showering

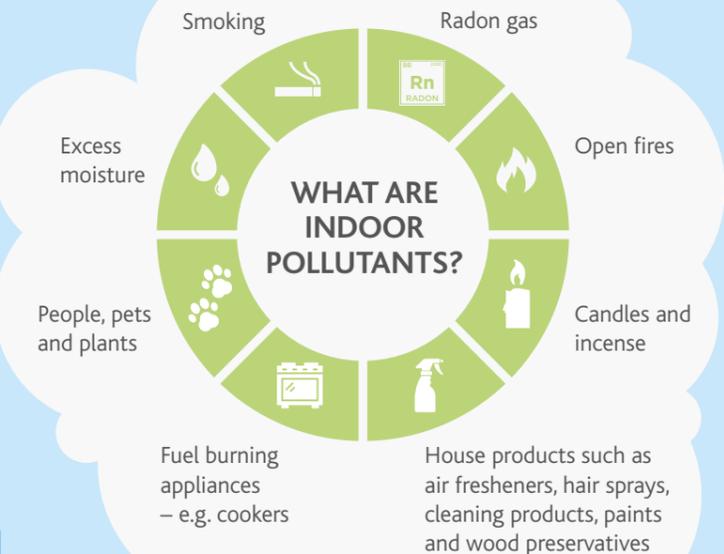
COMMON SYMPTOMS

of poor indoor air quality include:

- › coughing
- › sneezing
- › watery eyes
- › fatigue
- › dizziness
- › headaches
- › wheezing
- › allergic reactions



WHAT ARE INDOOR POLLUTANTS?



THE FACTS

On average, UK citizens spend **90%** of their time indoors...

That's **16 HOURS** a day in their homes

900 potentially dangerous chemicals, particles and biological materials in indoor air

The average family produces up to **10 litres** of water a day, leading to excess moisture that may result in condensation and mould growth

Your home could be **50x** more polluted than outdoors



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