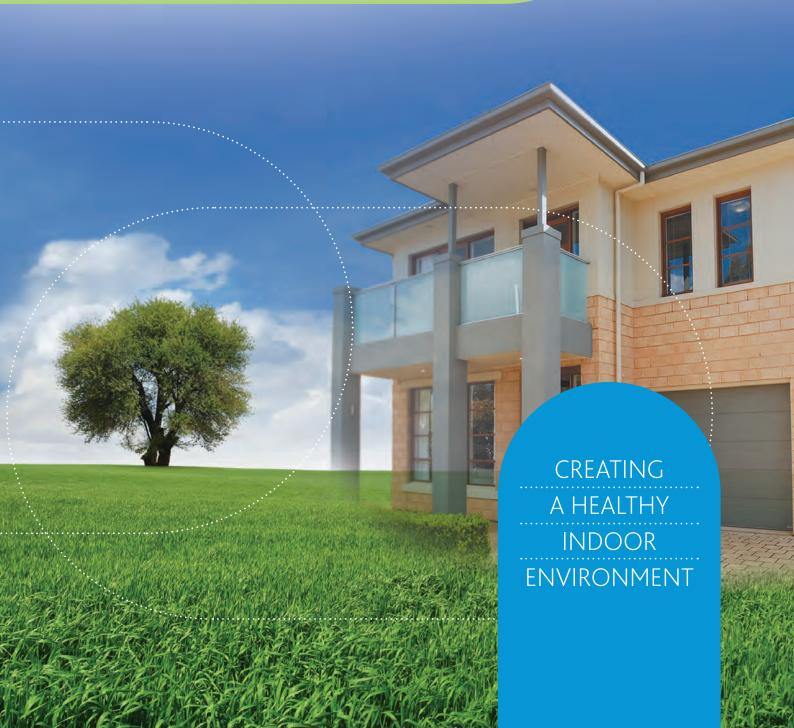


VENTILATION SOLUTIONS FOR SELF BUILDERS





CONTENTS

INTRODUCTION	3
SELF BUILD SOLUTIONS	4
INNOVATION	5
UNRIVALLED CHOICE AND SERVICE	6
DESIGN SERVICES	8
YOUR PROJECT TIMELINE	10
MVHR	12
Q-AIRE	14
DUCTMASTER	18
PIV	24

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

Nuaire is a British company that designs and manufactures innovative ventilation products for the residential and commercial sectors. We are proud to be recognised for our expertise, commitment to innovation and the outstanding quality of our products and customer service.

People are the heart of Nuaire, and we have over 400 staff at our headquarters with a further 65 technical sales engineers throughout the UK and Ireland.

Proud to Build British

Based in South Wales, our factory covers 18,000m², allowing us to manufacture almost all of our products on site; from small bathroom fans to large air handling units.

We source our motors and components from the UK, keeping our carbon footprint to a minimum and ensuring industry leading turn around times on customer orders.

Innovation cannot happen without investment. In recent years Nuaire has invested millions of pounds in to a new manufacturing plant to support its plans for growth. This has brought us greater capacity, increased flexibility, and lower manufacturing costs, which, when combined, allow us to offer innovation based on high quality and fast delivery.

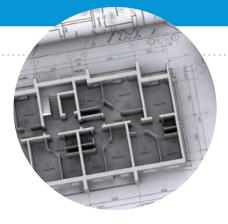




SELF BUILD SOLUTIONS

The complete ventilation solution at every stage of your build

At Nuaire we understand the ever increasing challenges that our customers encounter when building new homes. Our complete ventilation solution supports you at every stage of your build.







DESIGN

- Low energy systems to match every conceivable property size or type
- REVIT design service to replicate system performance
- Expert advice on product selection

BUILD

- Free BPEC training and best practice advice for your installer
- Comprehensive range of ancillaries at competitive prices
- Guaranteed next day delivery

COMPLETION

- Peace of mind with our guaranteed design
- Comprehensive product warranty
- Dedicated after sales support

If you are building your own home, or working with an installer, we offer products specifically designed to meet building regulations.

We don't just offer a 'one size fits all'; our low energy systems are designed to match every conceivable property size or type through a range of ventilation methods.

At Nuaire we offer more than just the best performing products on the market, we offer the full service.

The result, you get the best performing system to meet both your budget and property/development.





Innovation at its best

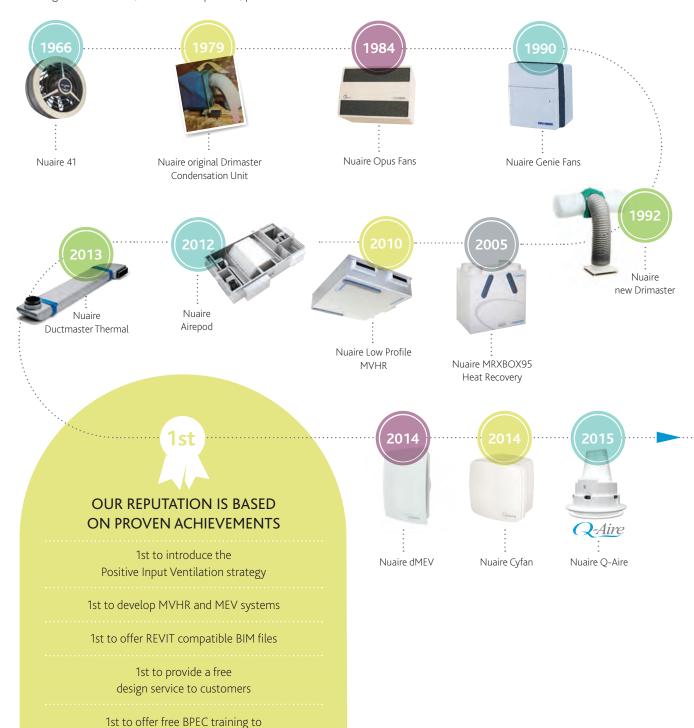
Since our inception in 1966, we have pioneered a number of new ventilation strategies and products now widely adopted by the industry, from the development of the Twin Fan to the invention of Positive Input Ventilation.

Today we remain at the forefront of domestic ventilation technology, with a range of products that solve the challenges faced by house builders and developers. From meeting building regulations to meeting short lead times, we deliver on product, price and service.

our installers and customers

Nuaire is committed to the principals of energy-reduction, heat recovery and renewable product innovation. We continue to lead the industry in developing best practice and helping clients reduce their energy demands and carbon emissions.

Our committed staff include leading experts who are constantly setting new standards for the industry by developing new, innovative products which are rigorously tested in our multi-million pound test facilities; considered to be amongst the most modern and comprehensive in the world.



Unrivalled choice and service

At Nuaire we offer more than just the leading fans on the market, we offer the complete ventilation solution to support you at each stage of your building project. As well as the widest range of energy efficient ventilation products available from a UK manufacturer, we have a range of services to simplify your selection, improve your SAP Q score and solve your design and site challenges.



Gold Star Aftercare

Our comprehensive product warranty and dedicated after sales support gives you peace of mind.



Advice On Compliance and SAP Q

Stay ahead of the latest building regulations and make the best product and fabric choices.







Personal Service

A one-to-one sevice from Nuaire's dedicated Self Build team.





Free Design Service

We provide detailed quotes and fan schedules, along with a drawing service using the latest 3D REVIT MEP software to replicate system performance and aid clash detection with other services.







The Full Service

Help with product selection, detailed parts lists and fast delivery ensure you meet your deadline and budget.

NUAIRE'S SELF BUILD SOLUTIONS

Design Services

Ventilation is often overlooked or considered late in the construction stage when the joists, heating and plumbing pipes, and even ceilings are installed. This can result in a number of obstacles for the installer to overcome; from noise and performance issues to non-conformance with building regulations, all of which are time-consuming and costly to remedy.

Why is design so important?

Part F of Building Regulations states the minimum ventilation rates must be achieved to provide adequate ventilation in a property. The design of a ducted system has considerable impact on both the air change and the Specific Fan Power, so any changes to the design or a poor installation can result in serious implications that are expensive to remedy. These can include:

- Air flow rates not achieved resulting in non-compliance with building regulations
- An increase in noise as the unit tries to achieve the desired air flow
- Poor indoor air quality resulting in condensation and mould

Design & Supply Service

A Design & Supply service is available for residential applications utilising 3D REVIT MEP software to illustrate ducting systems and components. This allows Nuaire to provide the complete service of design drawings, fan selection and ducting schedule for each dwelling and deliver these products as a bespoke package to assist project management and material control on site.

Drawings Service & 3D System Layout

Nuaire uses the latest AutoDesk Revit Software with 3D modelling to guarantee your design replicates system performance. Email your drawings to our Design Team and we'll give back to you a simple, clean system layout in 3D showing only the ventilation design with all other services removed. This can be dropped into your programme as a separate layer. The system we use generates the quote so you can be assured of an accurate parts list, and it ensures that all calculations required are taken into consideration when designing your project.

Parts List

The information we provide makes it easier to visualise how our products are actually installed in the building. We eliminate any concerns about ordering the correct ancillaries with our computergenerated parts list.



Nuaire's technical application team can offer expert advice and support to help you make the right choice in your ventilation strategy. Whether it's providing a simple, quick selection or offering advice on compliance with the very latest building regulations and environmental issues, we are here for you every step of the way.



GETTING IT RIGHT FROM THE START





Your Project Timeline

Ensuring you have the correct ventilation for your property and lifestyle, whilst ensuring you meet building regulations, can appear daunting. Nuaire's dedicated Self Build team are available to guide you through the process and our free design service means you will get the complete service of design drawings, fan selection and ducting schedule as a complete package, to help you with your project management.

1

INCEPTION

When undertaking a Self Build project, the importance of ventilation in any new build property and the regulations around it, should be recognised at the very beginning. The earlier you can start planning your ventilation strategy the better and Nuaire's dedicated Self Build team are on hand to discuss your ventilation requirements at the inception stage of your project. We will guide you through the building regulation requirements and help you decide upon the best ventilation strategy for your individual project.



2

PLANNING

After discussing your project with our Self Build team, you can send your planning drawings across and allow our experts to specify the most suitable ventilation solution for your property. At this stage we will provide you with a unit specification and preliminary quotation for your chosen ventilation strategy.







3 MONTHS

Around three months before your building will be watertight (before the roof is on and the windows go in), it is time to send across your floor plans in AutoCAD .dwg format – your architect should be able to provide you with this. Our design estimator will then upload your plans into our bespoke software to provide you with a final, tailored ventilation solution (including ducting layouts), to meet your expectations and comply with building regulations.



4

ORDER & DELIVERY

Once you have agreed your designs, it is time to place the order and arrange delivery to site. Our next day delivery service allows you to call off items from your order as and when they are required. We can even provide free of charge BPEC training for your installer, if required, so you can be confident that your ventilation solution will be installed and commissioned correctly.





COMMISSION & COMPLETION

Your ventilation unit is now fully installed and commissioned, ready for you to enjoy the indoor air quality your new home deserves.

SELF BUILD SOLUTIONS MECHANICAL VENTILATION WITH HEAT RECOVERY

Mechanical ventilation with heat recovery (MVHR) is fast becoming the most popular strategy for effective whole home ventilation for new build properties.

A proven low-energy, highly efficient ventilation method, Nuaire's heat recovery MRXBOX range offers all year round ventilation by extracting moisture and supplying fresh air, whilst recovering the heat that would otherwise be lost. The MRXBOXAB range are also the first MVHR units on the market with integral automatic summer bypass as standard.

Nuaire offers the widest range of heat recovery systems in the UK. What's more, we supply direct to self-builders, providing you with not only the best performing products on the market, but expertise and a service that is second to none.

MVHR How does it work?

NO NEED TO OPEN WINDOWS TO VENTIL ATE

Clean fresh air is continuously drawn into the property from outside through the supply air ducting

BOOST FACILITY

Both the supply and extract air can be boosted at any time by the home owner to increase the ventilation levels.

Light switches, PIRs and Humidistats can be used.



HIGH EFFICIENCY FILTERS HELP CREATE A HEALTHY LIVING ENVIRONMENT

Clean, fresh air passes through the filter inside the unit and into the counter-flow heat exchanger, where t is warmed using the heat recovered from extract before it is delivered to the habitable rooms of the home.

PREVENTS CONDENSATION BY KEEPING MOISTURE LEVELS LOW

Stale air is continuously extracted from the moisture producing areas, such as kitchens and bathrooms

The MVHR unit takes advantage of the heat by absorbing up to 95% of it and storing it in the heat exchanger.



All the options you need

Ventilation is often overlooked, or considered late in the construction when joists and other services are installed.

Nuaire offer a wide range of solutions, including MVHR units that can be mounted on the wall, or in the loft or ceiling voids. Nuaire also offer acoustic solutions to ensure you not only meet building regulations, but ensure efficient, whisper-quiet performance.









Aire Quick Quiet Quality

The Nuaire Q-Aire range of products has been designed to complement ventilation systems that are a necessity in modern living. We recognise that customers need products quickly, systems that work quietly and confidence in their high quality - something that comes as standard with Nuaire.



Q-Aire 1Z

Q-Aire Valves

The Q-Aire Supply & Extract Valves can help solve common problems with MVHR commissioning, balancing and performance. It is available in three versions: standard supply and extract (Q-Aire-V125), filtered extract (Q-Aire-EV125F) or filtered extract with integral humidistat (Q-Aire-EV125FH). The Q-Aire Extract Valve is the only lockable, filtered valve on the market and is fully-compliant with the latest NHBC guidance.

Features & Benefits

- Only filtered extract valve with built in humidistat on the market
- Lockable position for commissioning
- Easy maintenance.





Q-Aire 1Z

The Q-Aire 1Z units are designed to provide optimised balanced (supply and extract) mechanical ventilation heat recovery, with the incorporation of a built in silencer, ultimately offering the best all-in-one acoustic solution on the market.

This innovative unit ensures your home is filled with quality air your family deserves and is showcased in a sleek, modern finish worthy of your property.



Q-Aire AE (Acoustic Enclosure)

The Q-Aire AE units are designed to provide optimised balanced (supply and extract) mechanical ventilation heat recovery, all whilst being encased within our latest acoustic enclosures. This new unit incorporates an acoustic surrounding to your MVHR unit and flexible duct connectors, significantly decreasing noise and vibration output.



Q-Aire Carbon Filter

The Q-Aire Carbon Filter (MRXBOX-CARBONFILT) allows Nuaire to offer a complete ducting solution with a range of products that meet planning obligations and refine traditional filtration, leaving home owners with confidence in the maintenance of their heat recovery systems.

Features & Benefits

- Ensures the quality air your family deserves
- Low profile design allows flexible installation
- Optional additional filters available to further enhance filtration and protect the system.



MVHR Product Selector

	WALL MOUNTED							
	MRXBOX95-WM1/ MRXBOX95-WM1-OH	MRXBOX95AB-WM1/ MRXBOX95AB-WM1-OH	MRXBOX95-WM2/ MRXBOX95-WM2-OH	MRXBOX95AB-WM2/ MRXBOX95AB-WM2-OH	MRBOX95-WH1/ MRBOX95-WH1-OH	MRXBOX95AB-WH1/ MRXBOX95AB-WH1-OH	MRXBOX95AB-WH2/ MRXBOX95AB-WH2-OH	MRXBOX95B-LP1/ MRXBOX95B-LP1-OH
Feature	For properties up to 60m²/660ft²	For properties up to 60m²/660ft²	For properties up to 100m²/1100ft²	For properties up to 100m²/1100ft²	For properties up to 150m²/1600ft²	For properties up to 150m²/1600ft²	For properties up to 270m²/2900ft²	For properties up to 100m²/1100ft²
Kitchen + up to 1 wet room								
Kitchen + up to 4 wet rooms								
Kitchen + up to 6 wet rooms								
Kitchen + up to 7 wet rooms								
Discreet Run Monitor								
Integral automatic summer bypass								
Integral frost protection								
Integral humidistat								
Optional sensors and detectors								
Summertime boost facility								
MRXBOX-VSC LCD Controller compatible								
Silencer (SIL)								
First Fix (FF)								
Thermal Bypass								



Q-Aire MVHR Range

	WALL MOUNTED							
	MRXBOX95-WM2-AE/ MRXBOX95-WM2- AE-OH	MRXBOX95AB-WM2-AE/ MRXBOX95AB-WM2- AE-OH	MRXBOX95-WM2-1Z/ MRXBOX95-WM2- 1Z-OH	MRXBOX95AB-WM2-1Z/ MRXBOX95AB-WM2- 1Z-OH	MRXBOX95-WH1-AE/ MRXBOX95-WH1- AE-OH	MRXBOX95AB-WH1-AE/ MRXBOX95AB-WH1- AE-OH	MRXBOX95-WH1-1Z/ MRXBOX95-WH1- 1Z-OH	MRXBOX95AB- WH1-1Z/ MRXBOX95AB-WH1- 1Z-OH
Feature	For properties up to 100m²/1100ft²	For properties up to 100m²/1100ft²	For properties up to 100m²/1100ft²	For properties up to 100m²/1100ft²	For properties up to 150m²/1600ft²	For properties up to 150m²/1600ft²	For properties up to 150m²/1600ft²	For properties up to 150m²/1600ft²
Kitchen + up to 1 wet room								
Kitchen + up to 4 wet rooms								
Kitchen + up to 5 wet rooms								
Discreet Run Monitor								
Integral automatic summer bypass								
Integral frost protection								
Integral humidistat								
Optional sensors and detectors								
Summertime boost facility								
MRXBOX-VSC LCD Controller compatible								
Distribution Box (DB)								
Thermal Bypass								



ductmaster DUCTING & ANCILLARIES



Ductmaster is a fully comprehensive range of installation ancillaries for all ducted applications, to ensure you achieve the most cost effective solution.



Ductmaster Thermal:

Nuaire's award winning Ductmaster Thermal range is a quick and effective solution for ducting in unheated spaces. Unlike other thermal ducting systems that fit around the PVC pipe, Nuaire's Ductmaster is an all in one complete insulated ducting system, providing a cost - effective and quick installation.



Ductmaster PVC:

A comprehensive range of PVC ducting and ancillaries for the domestic market, Ductmaster PVC is available as a circular duct, a slim duct which is ideal for apartments or ceiling voids, or a flat duct for where space is at a premium.



Ductmaster Radial:

Nuaire Ductmaster Radial (NRD75) is a range of semi-rigid ducting and ancillaries, intended for installation in domestic properties. Unlike other types of ducting systems, Nuaire's radial ducting design negates the need for multiple lengths of duct, bends and ancillaries, minimising duct leakage and reducing installation time. Ductmaster Radial works perfectly with the Ductmaster Thermal ducting.







Ductmaster Thermal

Ductmaster Thermal is an award winning, all-in-one thermal ducting solution that fully complies with building regulations.

The lightweight material means that installation becomes a one-man job, while the unique clip system forms an airtight seal, with no need for sealant or tape. Installation is quick and easy, significantly reducing both costs and time spent on site.

The only complete solution on the market

- Fully compliant with Building Regulations
- Improved thermal efficiency
- Unique clamping mechanism no requirement for sealant and tape
- Lightweight material one person install
- Simple quick-fit components
- Significantly reduces time on site
- Environmentally friendly through eco-efficiency
- Cost-effective solution
- Independently tested for thermal conductivity by BASF – Germany
- LABC Approved
- Patent Pending
- Independently tested for air-tightness by BRE

Thermal Ducting Building Regulations

Ductmaster's range of thermal duct is specifically designed to comply with 2010 Building Regulations to significantly improve thermal conductivity and thermal resistance of ventilation ducting used in domestic properties.

The requirement

Ducting should be insulated where it passes through unheated areas and voids (e.g. loft spaces) with equivalent of at least 25mm of a material having a thermal conductivity of ≤ 0.04 W/(m.K) to reduce the possibility of condensation forming. Where a duct extends above roof level the section above the roof should be insulated or a condensate trap should be fitted just below roof level.

The reason

Ducting in MVHR systems carry warm air through them. When these ducts pass through unheated spaces, such as a loft, if the ductwork does not have sufficient thermal insulation condensation can form on the ductwork and cause water damage to your property.





Ductmaster PVC

Nuaire provides a comprehensive range of ancillaries for all ducted applications to ensure the most cost effective solution can be achieved.

Teachers

Circular duct

Provides optimum system efficiency. Lightweight with simple push fit connections for ease of installation.

Flat duct systems

Ideal for apartments, ceiling voids, loft and other confined spaces where space is at a premium, without reducing whole system performance. Available in 204mm x 60mm and 220mm x 90mm high performance duct.

Attenuation

Reduce duct noise as per 'Domestic Compliance Guide 2010' and noise requirements in 'Part F Building Regulations 2010'. Attenuator

ducting also reduces cross talk through the ventilation systems, between rooms.

Wide selection of internal/external grilles

Designed to maximise system airflow performance and occupant comfort.

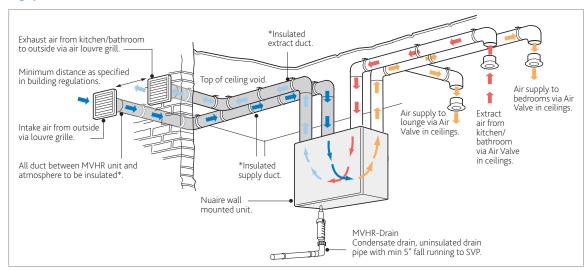
Fire protection

Available for all duct systems to meet regulations.

Self Sea

A simple and innovative solution for ducting systems to ensure the air leakage in and out of the duct joint is kept to an absolute minimum.

Typical Installation





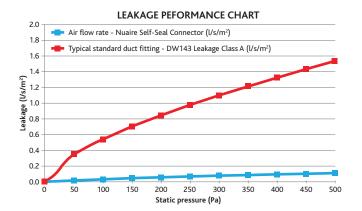
NO MORE SEALANT & TAPE



Nuaire Self-Seal

Nuaire Self-Seal is a simple and innovative solution for ducting systems to ensure the air leakage in and out of the duct joint is kept to an absolute minimum. This unique design removes the requirement for traditional taping and sealing of ducted joints and significantly reduces onsite installation time. The component provides a fit and forget solution and offers optimum performance compared to standard ducting fittings.

- · Meets all building requirements
- · Guarantees the correct airflow every time
- · Simple push-fit connection
- Prevents the ingress of dust and debris into the ducting systems
- Available in 125mm round pipe fitting, 204mm x 60mm and now 220mm x 90mm rectangular pipe fitting.



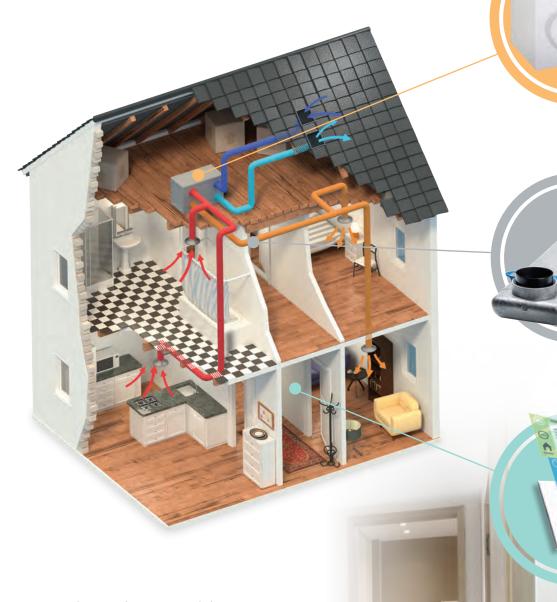
For more details call 029 2085 8500 email enquiries@nuaire.co.uk or visit www.nuaire.co.uk/residential



For more details call 029 2085 8500 email selfbuild@nuaire.co.uk or visit www.nuaire.co.uk/residential xpress.nuaire.co.uk







From working with your initial designs, to supplying the perfect ventilation solution for your property, Nuaire will be with you every step of the way. We can even supply free BPEC training for your installers, to make sure your system is installed, tested and commissioned to meet building regulations.

RENOVATION SOLUTIONS POSITIVE INPUT VENTILATION

Whether you're planning an extension or a major overhaul, Nuaire has a ventilation solution to suit your project needs. Not all ventilation solutions are suitable for renovation projects and that's why our ventilation experts are on hand to look over your plans and discuss your specific requirements, both face to face and over the phone.

INSTALLED IN OVER HALF A MILLION HOMES WITHIN THE UK

Positive Input Ventilation (PIV) systems provide a continuous supply of fresh, filtered air into the house through positive pressurisation, creating an environment in which condensation and mould growth can't exist. BBA certification ensures complete compliance with the latest Building Regulations. As the originator of this technology, Nuaire continues to lead the way with a successful range of low-energy PIV systems that cure condensation dampness and improve indoor air quality.

CREATES A HEALTHY LIVING ENVIRONMENT

Significantly improves indoor air quality by removing indoor air pollutants such as carbon monoxide and keeping out external pollutants such as traffic fumes and pollen

MOISTURE AND CONDENSATION ARE DRIVEN OUT

the filtered air gently pressurises the home from inside out, forcing out the stale air.

PIV How does it work?



OPEN WINDOWS TO VENTILATE

Clean, fresh air is continuously drawn in through the lofts natural leakage points, passed through the filters and fed into the property via a central hallway diffuser.

PROVEN TECHNOLOGY

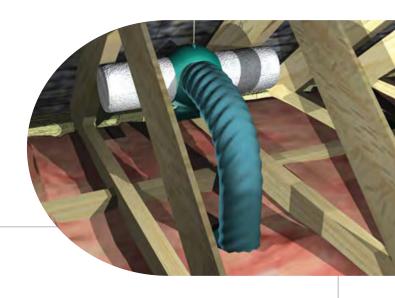
PIV is guaranteed to provide great indoor air quality and is proven to help allergy and asthma sufferers. It is also the best known solution to reduce harmful radon gas.

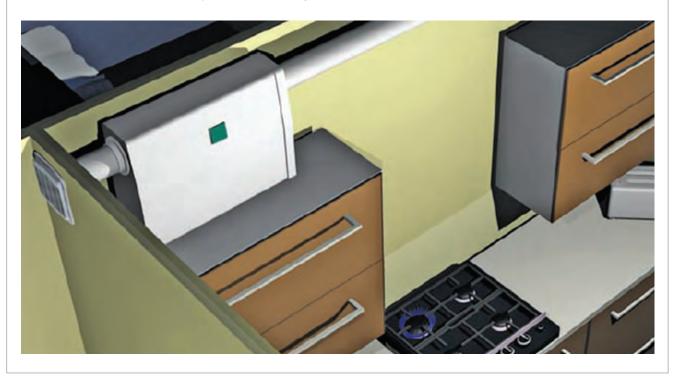


Nuaire offers solutions for multi-storey homes both with and without loft space.

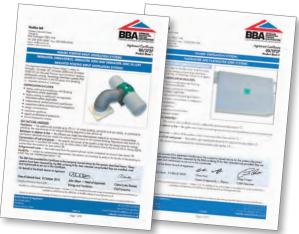
The simple installation of 'Drimaster' is fully compliant to building regulations and only requires minimal maintenance.

For homes without a loft, the 'Flatmaster' product is compact and can be fitted in a convenient location, such as a kitchen cupboard or hallway.









PIV Product Selector

Feature	Drimaster	Drimaster 2000	Drimaster Heat	Drimaster 365	Flatmaster	Flatmaster 2000
Can be installed in loft space						
Suitable for properties with no loft space						
Optional fire damper for 3 storey accommodation available						
System Standby Mode - For summer months when loft temperature exceeds 23°C						
Intelligent Heat Recovery - Twin sensors optimise energy efficiency, adjusting settings to provide increased comfort						
Integral Heater - To provide additional heating of the incoming air if required e.g. during very cold weather. The heater can be used to distribute filtered, warm air throughout the property						
Optional heater facility - To provide additional heat to the incoming air if required, i.e. during very cold weather						
Security - Allows occupants to keep windows closed for added security						
Optional Boost Facility - When additional ventilation is required, i.e. cooking odours etc.						
Manual boost switch provided - when additional ventilation is required, i.e. cooking odours						
Five Year Warranty						
Choice of speed settings to suit size and style of property						
Helps maintain and reduce Radon gas levels						



The Drimaster Range

The Drimaster provides whole home ventilation using the Positive Input Ventilation principle, which introduces fresh filtered air into the dwelling at a continuous rate, encouraging movement of air from inside to outside.

To achieve this, the unit is mounted in the loft space, drawing air through the filters and inputting it, at ceiling level, into the property.

The Drimaster units are fitted with an internal temperature sensor, which continuously monitors the temperature in the loft and boosts the air volume when the loft temperature is above a set level (heat recovery mode). If the loft temperature becomes excessive, the unit will switch to standby mode (no airflow). Once installed, the airflow can be set to suit the house size and if required, the way it responds to the temperature change within.

Drimaster 2000

The Drimaster 2000 features 'Intelligent Heat Recovery'. Twin sensors optimise energy efficiency, adjusting settings to provide increased comfort.

The Drimaster 2000 also features an optional boost facility for when extra ventilation is required, i.e. cooking.



The unit air volume can be manually boosted to maximum speed by wiring in a simple one way switch (Part No 779891) into the wire supplying the sensor. By switching the unit to 'Boost', all other functions will be overridden.

Drimaster Heat

The Drimaster Heat features an Integral Heater to provide additional heating of the incoming air if required e.g. during very cold weather. The heater can be used to distribute filtered, tempered air throughout the property.

The Flatmaster Range

FOR PROPERTIES WITHOUT LOFT SPACE

Low cost ventilation for properties with no loft space. The unit is designed to take fresh air from outside, clean the air and discharge it into the central hallway via a system of ducting.

The dwelling's internal air discharge grille is usually installed at a high level in a central location within the hallway, although discharging the air down the length of the hallway (away from the front door) should also prove acceptable. Unit performance may be enhanced if an existing heat source can warm the discharged air, e.g. by locating the discharge grille above a radiator.



Flatmaster 2000

The unit is designed to take fresh air from outside, clean the air, warm it (if fitted with a heater) and discharge it into the central hallway via a system of ducting. The dwelling's internal discharge grille is usually installed at a high level in a central hallway, although discharging the air down the length of the hallway (away from the front door), should also prove acceptable.

Unit performance may be enhanced if an existing heat source can warm the discharged air e.g. by locating the discharge grille above a radiator.

Additional heat when required

If additional heating of the incoming air is required e.g. during very cold weather, the integral heater can be used to distribute filtered, warmed air throughout the property.



NUAIRE

Western Industrial Estate Caerphilly CF83 1NA

Residential product orders or enquiry: Tel: +44 (0)29 2085 8500 Fax: +44 (0)29 2085 8555 selfbuild@nuaire.co.uk

www.nuaire.co.uk xpress.nuaire.co.uk

