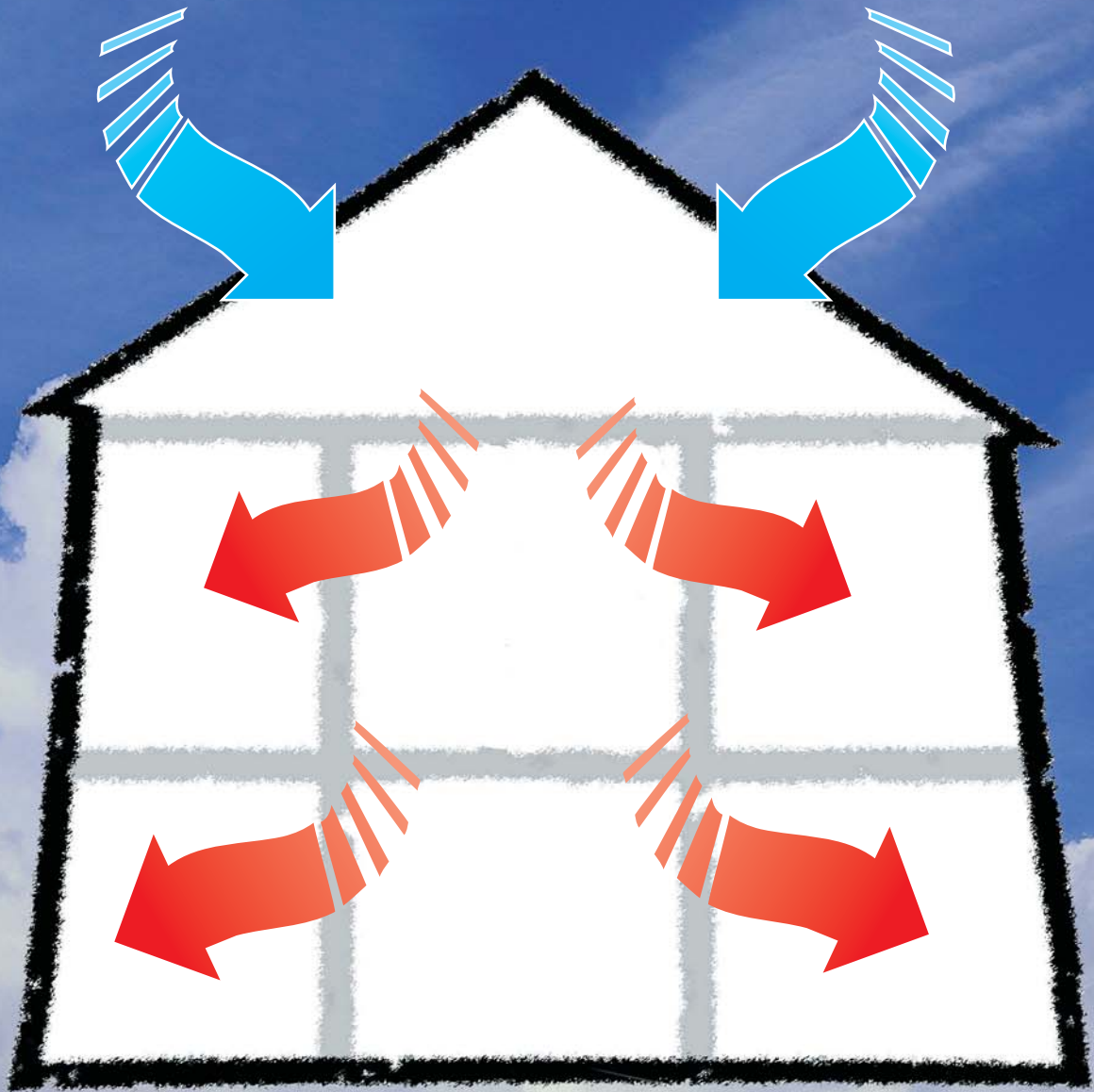


"low energy

positive input ventilation (PIV) units
for homes and apartments"



*"the importance of good indoor
air quality in your home"*

Indoor air pollutants

- **Water Vapour**
- **Cigarette Smoke**
- **Carbon Monoxide**
- **Nitrogen Dioxide**
- **Solvent Vapours**
- **Formaldehyde**

External pollutants

- **Traffic Fumes**
- **Industrial Process Pollutants**
- **Pollens**
- **Radon**
- **Noise**

"the facts"



How can external pollutants enter the home?

Obviously through open doors, windows, air bricks and trickle ventilators (usually housed above your double glazing). But, there are other less obvious points of entry. Every home has thousands of tiny gaps through which unfiltered and unheated external air can enter. Even modern homes built to current Building Regulations will have some degree of uncontrolled air leakage.

What causes indoor air pollutants?

In short, we do!



We wash, we cook, we clean.



We use aerosols.
We decorate and furnish our homes.



Some of us smoke.
All of us breathe.

All of the above day to day activities can contribute pollutants to some extent. Combined, they can have a significant impact on the quality of air in our homes and consequently our health.

Good ventilation will deal with these pollutants.

Indoor air quality and asthma.

It is estimated that some 80% of asthmatics are allergic to dust mites (or more specifically to the faeces of these creatures). Dust mites are too small for us to see but they can be present in huge quantities in soft furnishings and more worryingly, in our mattresses and pillows.

The faeces can also float in the air when you shake your bedding or when you walk over the carpet where they have settled.

It is the inhalation of this allergen that can trigger an asthma attack.

Dust mites breed best in a humid environment.

Just the sort of environment you will have if your home is poorly ventilated.

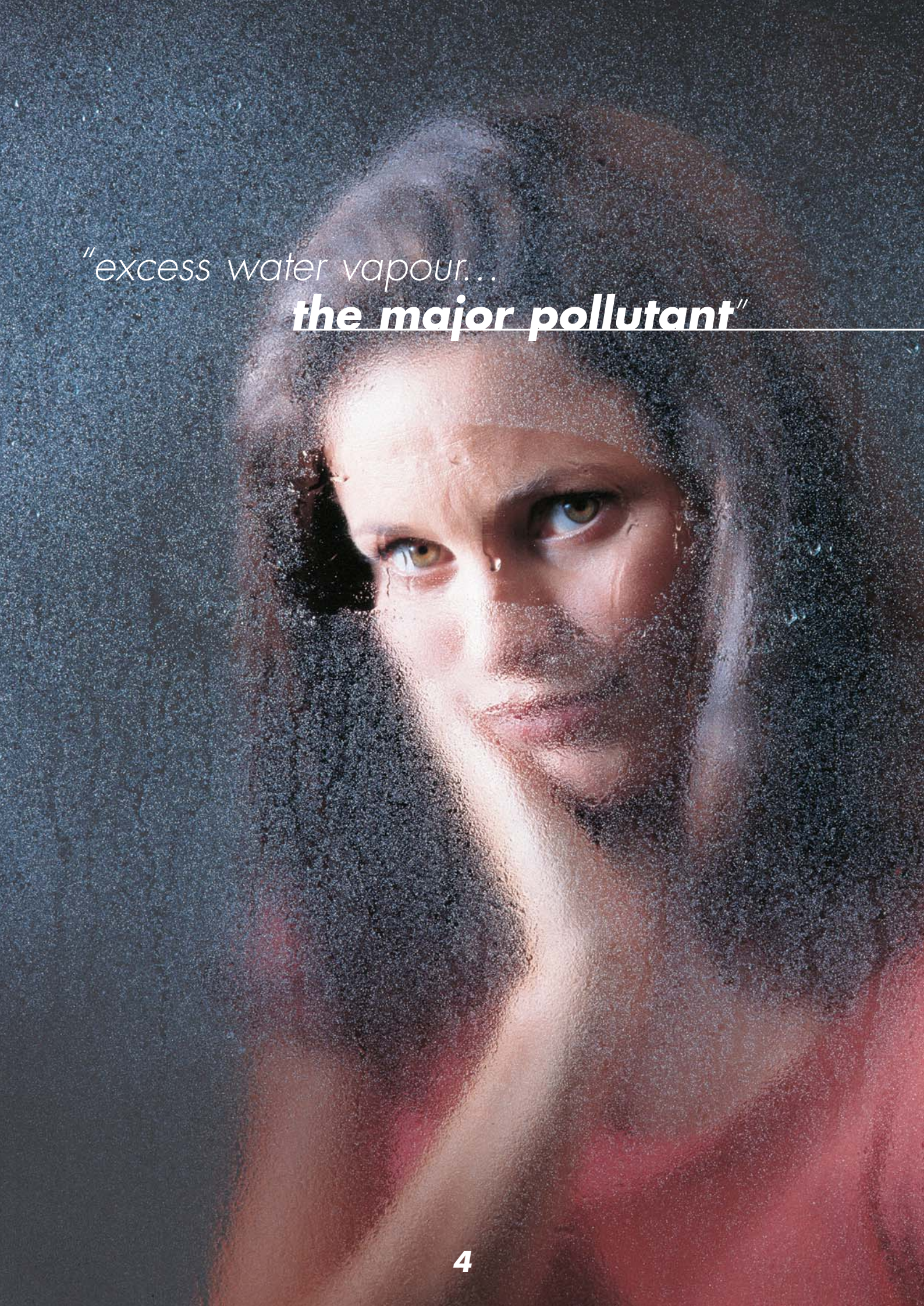
Ventilating a home can create a hostile environment for the dust mite; mite populations can fall and faeces production reduced.

Clinical research has proven that whole home ventilation can play a significant part in controlling dust mite allergens.

Nuaire's own experience through hundreds of reports from satisfied customers, who claim significant relief from their condition, backs up this research.

NB. Nuaire do not claim that the use of their products will cure asthma nor eliminate asthma attacks.





"excess water vapour..."

the major pollutant

"a growing problem"

These days there is no stigma attached to having condensation dampness in our homes. It is a common consequence of modern living and more energy efficient homes.



How condensation can affect the fabric of our homes and our health.

Most homes will experience condensation on their windows and in many cases windows will stream with water.



The limitations of extract fans...

- Usually activated at time of moisture production which is often too late.
- Rely on additional background ventilation such as trickle ventilators, throughout the home.
- Can be noisy.
- Need considerable maintenance/cleaning for efficient operation.
- Can use significant electrical power.
- Draw in unheated, unfiltered air into the home.
- Can compete for air with opened flued combustion appliances which can result in poisonous carbon monoxide gases entering the home.

...and what about dehumidifiers?

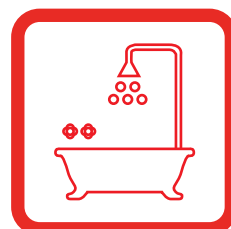
- Do not ventilate a home.
- Can consume large amounts of electrical power.
- Can be noisy.
- Require regular emptying of condensate.

Just where does condensation come from?

From us! Through bathing and showering, cooking, washing and drying our clothes and by us just being there, because every human emanates moisture.



It is estimated that all this amounts to 4 pints per day per person!



You can't see this moisture once it is absorbed into the indoor air, until such time as it comes into contact with a cold surface for it to condense on.

This is why significant condensation will occur overnight as the fabric of the building cools

We have all seen this effect on bedroom windows first thing in the morning.

This is the result of moisture laden air condensing on the cool surface of the bedroom window.

But condensation can also lead to mould growing on our walls and in some cases on our clothes when stored in wardrobes.

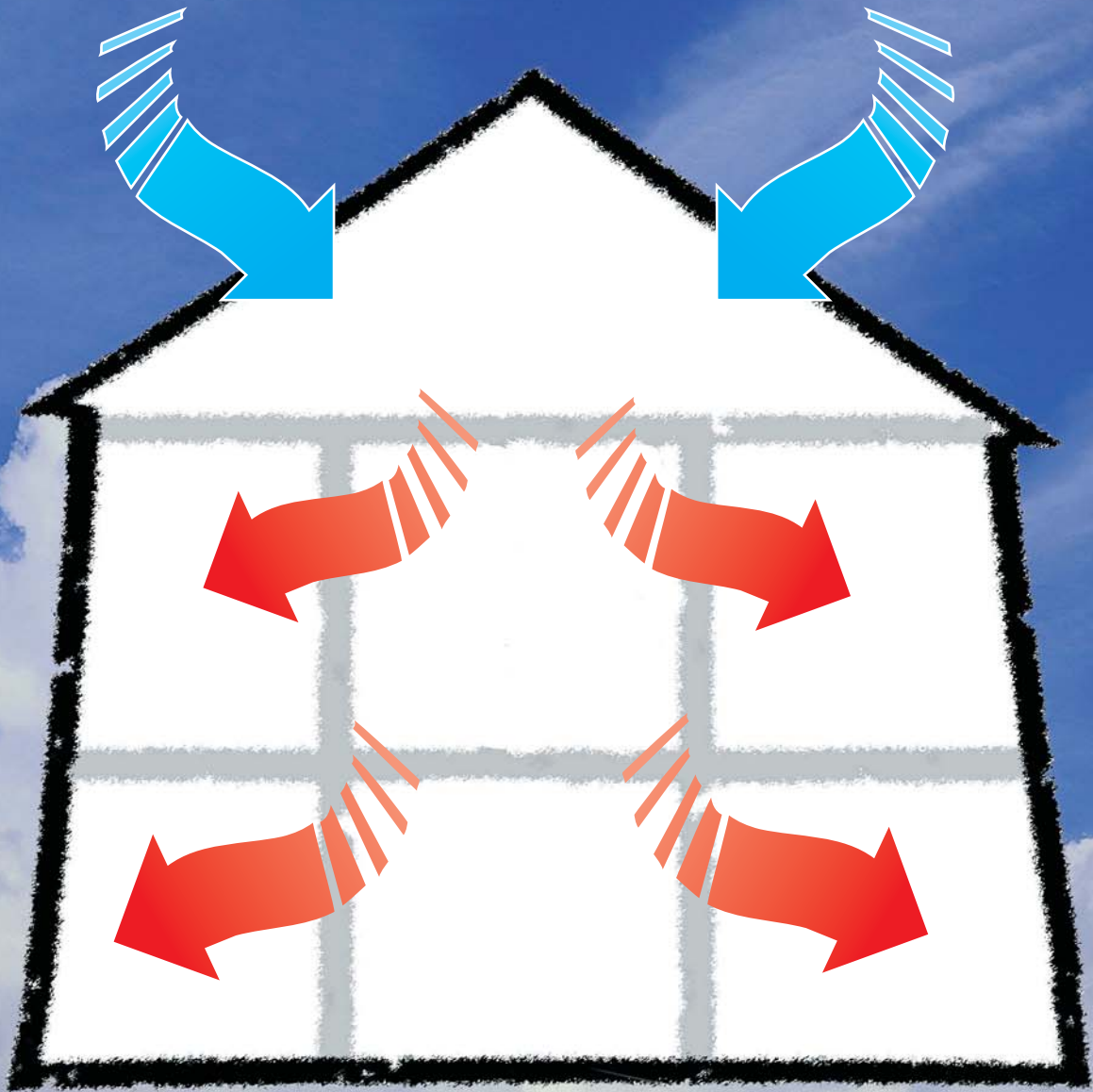
This is not only unpleasant, it is damaging and costly causing premature redecoration or replacement.

This dampness can also be evident through musty smells in our homes.

Condensed water on the surfaces of our homes provides ideal conditions for mould spores already in the air to germinate and grow.

Many people associate this mould growth with health problems.

"the modern way to
ventilate your home"



"low energy positive input ventilation"

The UK's most popular method of whole home ventilation

Energy benefits.

Your roof is an energy source.

South east to south west facing tiles or slates absorb energy from the sun.

Even the loft space itself is a substantial source of energy. During the heating season it will almost always be warmer than outside because of solar gain and conduction and convection losses from the home.

Positive input ventilation units use the tiles/slates and/or the loft space itself to warm the incoming air before delivering it into the home.

Solar air collectors can also be used for even greater pre-heating of the ventilation air.

This has the effect of helping to heat the home which can result in lower fuel bills and, for those interested in the environment, reduced carbon emissions.

The input air enters your home at ceiling level, usually on your landing. This method re-circulates the warm air that rises and collects there as well as reducing the heat loss to your loft.

The slight pressurisation effect created helps reduce infiltration of unheated air through the leakage points found in all homes, having a consequential energy benefit.

In simple terms, a good quality low energy positive input ventilation unit will provide a significantly greater amount of energy in the form of heat into the home than the energy it consumes in the form of electricity.

In short, providing a considerable net energy gain.



How does low energy positive input ventilation work?

Unlike extract systems which draw in unheated, unfiltered air, even a basic positive input ventilation unit gently supplies tempered, filtered air into a home using otherwise unused heat within a roof.

The benefits of this are enormous;

Firstly, it means that a significant proportion of external pollutants are prevented from entering the home.

Secondly, the use of the otherwise unused heat in the roof results in the ventilation unit providing a significant net energy gain to the home.



Thirdly, there is no better way to ventilate a home than from the inside out via a single, centrally located, supply air diffuser.

A good quality unit, fitted in your loft, will operate at an almost imperceptible noise level. You will hardly know its there.

A properly designed and installed unit will ensure that old, contaminated, vapour laden air in your home is continuously diluted, displaced and replaced with good quality air.

The result is improved indoor air quality and an environment in which condensation dampness cannot exist.

The old air exits through the thousands of air leakage points found in all homes. Indeed, positive input ventilation will even help to suppress unwanted infiltration (draughts).

The installation of a low energy positive input ventilation unit will ensure the air in your home is completely replaced with better quality air around 20 times a day.

This is the recommended rate to maintain good air quality.

"Drimaster

low cost whole home ventilation"



Sensor/Indicator



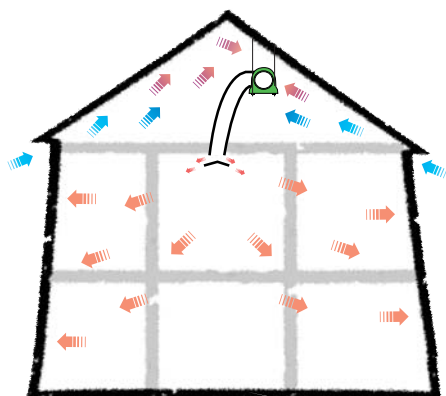
Ceiling diffuser

Features & Benefits

- Can comply with Building Regulations Ventilation requirements and contributes towards 'conservation of fuel and power'.
(Please refer to BBA Certificate 00/3727 for full details).
- Extremely low power consumption – average approximately 0.16 watts/litre/second.
- Very low maintenance requirement (filter replacement every 5 years).
- Highly variable and re-programmable airflow control strategies for optimum energy efficiency, flexibility and occupant satisfaction.
- Whisper quiet operation.
- Optional heater kit available.
- Significantly improves indoor air quality.
- Can be used for Radon gas control.
- 5 year warranty.

Drimaster

a low cost, low energy positive input ventilation unit that will make use of heat in a 'cold roof'.



Drimaster

Drimaster is certified for installation in new homes under the UK Building Regulations by the British Board of Agreement (BBA).



Fixed heat recovery

The internal temperature sensor allows the unit to adjust itself to suit the temperature in your loft. During sunny months the temperature in your loft can be excessive. At this time of year it would be uncomfortable to bring this heat into your already warm home. Your Drimaster will sense this condition and automatically move to standby mode.

The unit will start again automatically when the temperature reduces to an acceptable level.

5-year life filters

- Huge filters (0.47 sq.m) that only need replacement once every 5 years.
- NB: There is no other maintenance required.
- G4 grade, which means that they are so fine they will even, exclude pollen; great for hay fever sufferers.

Net energy gain

- Fan uses only 5 watts of electrical power (on average).
- Average energy gain approximately 100 watts of heat.

Whisper quiet

For most of the time it is unlikely that you will hear or be aware that your Drimaster is operating.

6 speeds to choose from

House sizes and occupancy levels vary so your Drimaster can be adjusted to exactly suit your home. This will ensure that it will always match your needs.

Easy non-disruptive installation

Your Drimaster is fitted in the loft, out of sight, no holes to knock through walls or new glass for windows.

Your installer will need to fit the diffuser in your ceiling (usually on your landing). All this usually takes just a couple of hours.

"Drimaster 2000

low cost whole home ventilation"



Sensor/Indicator



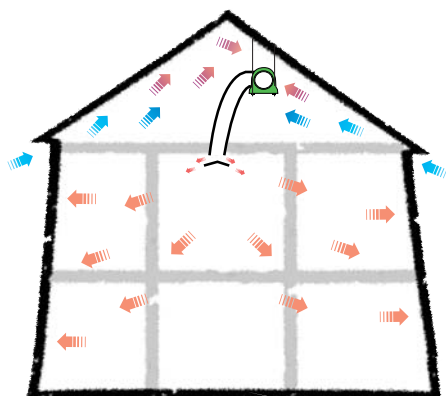
Ceiling diffuser

Features & Benefits

- Can comply with Building Regulations Ventilation requirements and contributes towards 'conservation of fuel and power'.
(Please refer to BBA Certificate 00/3727 for full details).
- Extremely low power consumption – average approximately 0.16 watts/litre/second.
- Fully automatic with 'Intelligent Heat Recovery'.
- Very low maintenance requirement (filter replacement every 5 years).
- Unit/filter status indication provided.
- Highly variable and re-programmable airflow control strategies for optimum energy efficiency, flexibility and occupant satisfaction.
- Whisper quiet operation.
- Optional heater kit available.
- Optional manual boost switch available.
- Significantly improves indoor air quality.
- Can be used for Radon gas control.
- 5 year warranty.

Drimaster 2000

a low cost, low energy positive input ventilation unit that will make use of heat in a 'cold roof'.



Drimaster

Drimaster is certified for installation in new homes under the UK Building Regulations by the British Board of Agreement (BBA).



Intelligent 4 way heat recovery

- Solar gain in your loft.
- The expensive heat from your home heating system that passes through the loft insulation.
- The unique Drimaster diffuser that re-circulates the heat at ceiling level on your landing.
- The patented, intelligent heat recovery system that will boost the fan when the temperature in your loft is greater than that in your home (in the heating season).

5-year life filters

- Huge filters (0.47 sq.m) that only need replacement once every 5 years.
NB: There is no other maintenance required.
- G4 grade, which means that they are so fine they will even, exclude pollen; great for hay fever sufferers.

Net energy gain

- Fan uses only 5 watts of electrical power (on average).
- Average energy gain approximately 100 watts of heat.

Whisper quiet

For most of the time it is unlikely that you will hear or be aware that your Drimaster 2000 is operating.

6 speeds to choose from

House sizes and occupancy levels vary so your Drimaster 2000 can be adjusted to exactly suit your home. This will ensure that it will always match your needs.

Easy non-disruptive installation.

Your Drimaster 2000 is fitted in the loft, out of sight, no holes to knock through walls or new glass for windows. Your installer will need to fit the diffuser in your ceiling (usually on your landing). All this usually takes just a couple of hours.

Automatic cut off when the temperature in the loft becomes excessive.

During sunny months the temperature in your loft can be excessive. At this time of year it would be uncomfortable to bring this heat into your already warm home. Your Drimaster 2000 will sense this condition and automatically move to standby mode. The unit will start again automatically when the temperature reduces to an acceptable level.

"Drimaster 365

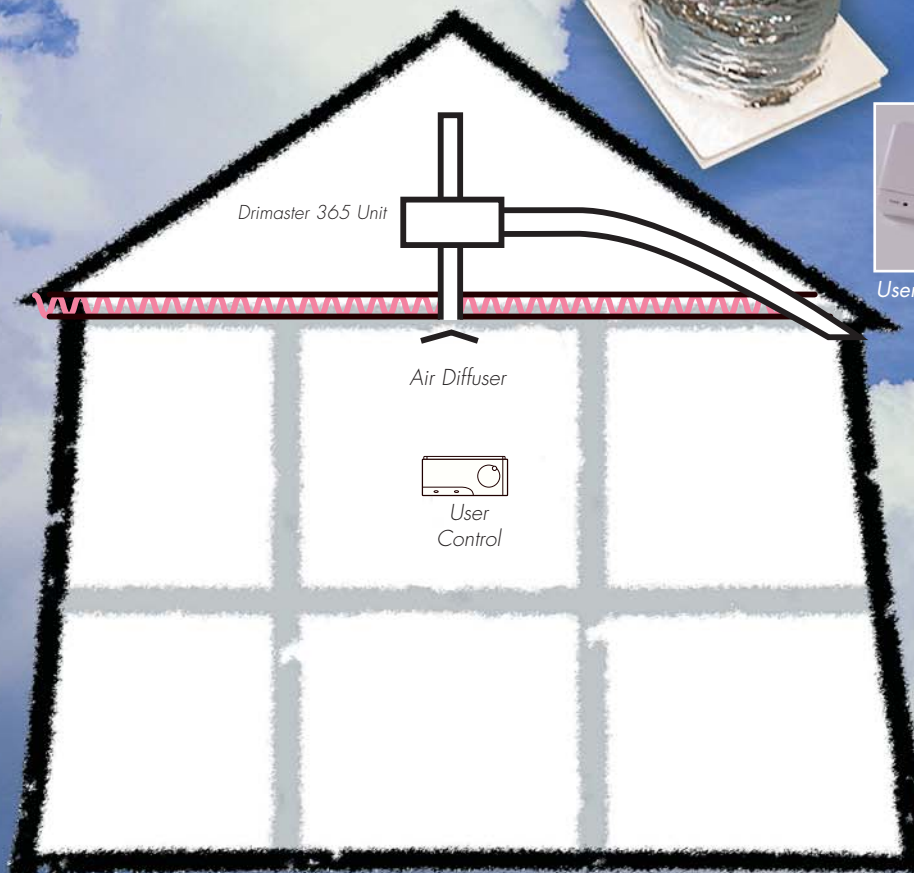
provides all year round whole home ventilation"



Ceiling diffuser



User Control

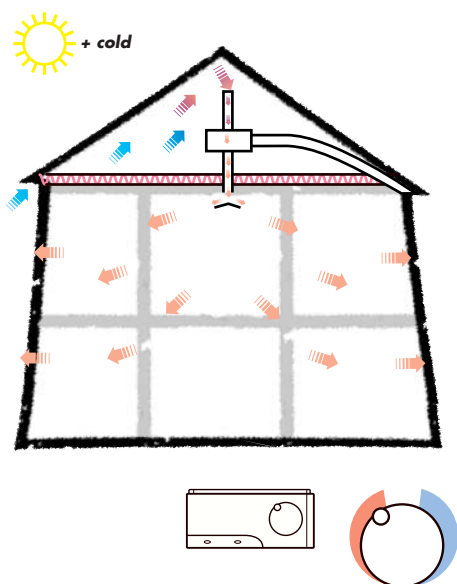
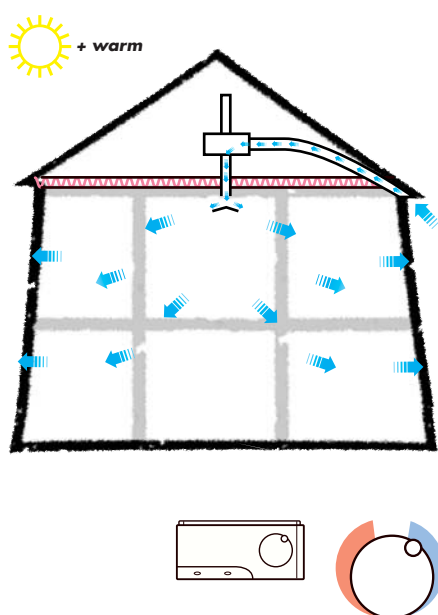


NOTE:

This diagram shows a 'cold roof' installation.
The unit can also be installed into a 'warm roof'.
Please contact us for further details.

Drimaster 365

All year round whole home ventilation that helps to heat or cool your home using external air drawn via your loft or directly from outside.



All year round ventilation

- Drimaster 365 is a low energy positive input ventilation unit that operates 24 hours a day, 365 days a year. Unlike conventional positive input ventilation units which only draw air from the loft, Drimaster 365 can also draw in air directly from outside.

This is particularly advantageous in warm weather, when a conventional unit would have switched itself off because of a high loft temperature, and especially on those warm summer nights.

Your unit control will automatically select air from either outside your home or loft or a mixture of both according to your selection by continually sensing the air temperature in each location.

Simple user control

- All you do is select whether you want cooler or warmer air. Drimaster 365 will follow your instructions automatically.

Intelligent heat recovery

- If, during the heating season, the temperature of heat available is greater than that in your home, Drimaster 365 will increase its airflow automatically and deliver even more free heat into your home helping to reduce your heating bills.

Suited for "cold roofs" and "warm roofs"

- Unlike conventional positive input ventilation units that are only suited to a 'cold roof' construction, Drimaster 365 is suitable for "warm roof" and "cold roof" installation. Please contact us for further details of "warm roof" installation.

Drimaster 365 can be upgraded

- Drimaster 365 can be upgraded to Sunwarm Tile at a later date if required with the addition of an underside roof plenum (sealed chamber).

Other benefits.

- As outlined overleaf for the Drimaster 2000, Drimaster 365 provides: intelligent 4 way heat recovery, 5 year life filters, a net energy gain, whisper quiet operation, 6 speeds and non disruptive installation.

"Flatmaster

whole home ventilation"



Effective, easily cleaned and replaced filter for speedy maintenance and clean fresh air.

Features & Benefits

- Extremely low power consumption – as little as 4.6 watts.
- Very low maintenance requirement (filter clean every 1-2 years).
- Interchangeable, multi-positional, circular and rectangular inlet/outlet spigots for improved aesthetics and simpler installation.
- Optional heater kit available.
- Optional manual boost switch available.
- Whisper quiet operation.
- Significantly improves indoor air quality.
- 5 year warranty.

Flatmaster

a low cost, low energy positive input ventilation unit for use in homes without a loft

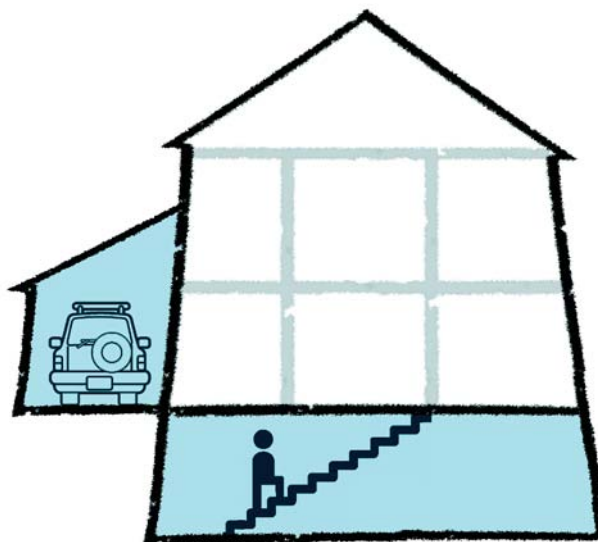


Lower cost derivative of Flatmaster 2000

Flatmaster operates in a similar way to the Flatmaster 2000 unit (see pages 20 and 21), but does not incorporate the heater or airflow boost facility.

Suitable for other applications

The Flatmaster unit can also be used to provide ventilation to basements, cellars, garages and other areas that would benefit from a continuous supply of fresh, filtered air.



"Flatmaster 2000

whole home ventilation"



Remote boost switch for increased filtered, fresh air when required.



Heater controlled by override switch and internal thermostat.

Features & Benefits

- Extremely low power consumption – as little as 8 watts.
- High efficiency, Grade G3 air filter ensures a continuous supply of good quality air to the home.
- Very low maintenance requirement (filter clean every 1-2 years).
- Interchangeable, multi-positional, circular and rectangular inlet/outlet spigots for improved aesthetics and simpler installation.
- Whisper Quiet operation.
- Fitted with thermostatically controlled heater, with manual override, to temper the incoming air if required and help heat the home.
- Manual boost switch provided for periods when increased airflow is required e.g. hot summer nights.
- 5 year warranty.

Flatmaster 2000

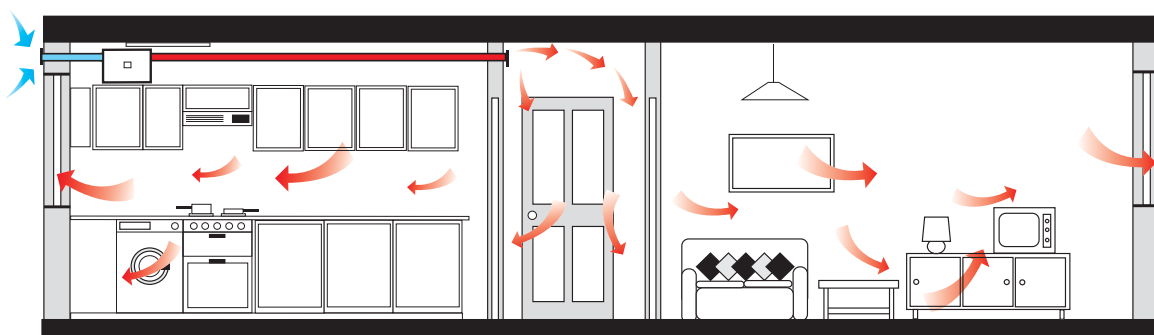
a low energy positive input ventilation unit for use in homes without a loft



Redistributes heat from ceiling level

Input air is directed across the ceiling (usually in your hallway as shown in the diagram above).

This uses a scientific principle called the Coanda effect, which has the impact of mixing with the otherwise unused warmer air that has risen above head height in your home. It therefore increases the efficiency of your heating system.



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 as shown in the diagram above.



"for extraction rates up to
25 litres/second"



Genie

Features & Benefits

- Complies with Building Regulation ventilation requirements
- Exceptionally quiet operation, imperceptible to a maximum of 30dBA @ 3m
- Various control options available
- Available in 12v and 230v models
- Suitable for surface, semi-recessed, window and duct mounting
- Clip in and push fit components for simpler and quicker installation and maintenance
- 5 year warranty



Easily removed, cleaned and replaced push fit washable filter.



Interchangeable control modules.



Simple installation and maintenance using clip in components.



"for extraction rates up to
74 litres/second"



Easily removed and cleaned filters.



Simple clip in fan and motor assembly for easy cleaning and maintenance.

Genie NKF1

Features & Benefits

- Complies with Building Regulation ventilation requirements
- Exceptionally quiet operation, imperceptible to a maximum of 43 dBA@3m
- Various control options available
- Suitable for surface or semi-recessed mounting
- Clip in and push fit components for simpler and quicker installation and maintenance
- 5 year warranty

