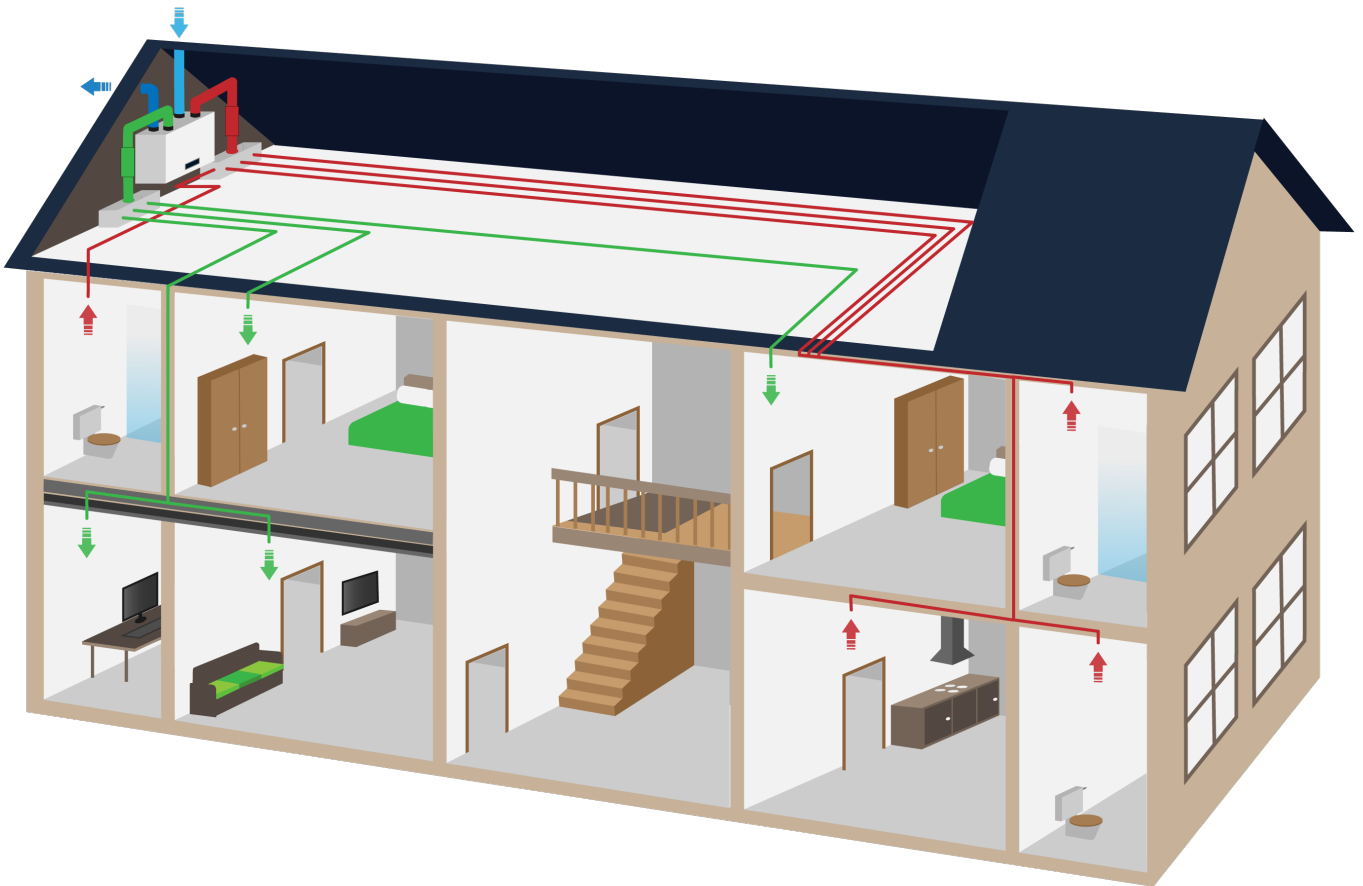




MVHR
Buyers
Guide



What is MVHR?

MVHR, Mechanical Ventilation Heat Recovery, is a ventilation system that both extracts and supplies air so that your home is provided with the best possible indoor air quality.

Being extremely efficient a MVHR system can recover up to 90% of heat being lost through extraction and transfer this to incoming air.

Benefits of MVHR

- Constant supply of fresh, healthy, filtered air to your home
- The best available ventilation system for new or existing homes
- No trickle vents or bathroom extractor fans required
- Eliminates mould, mildew, and combats condensation
- Recovers up to 95% of heat extracted from wet rooms
- Natural cooling without opening windows
- Radon dispersion
- Balanced heat distribution throughout the home
- Your home is quieter and draught free
- Complies with the latest building control requirements
- Clinically proven to help allergy and asthma sufferers
- Fully controllable system with manual or remote controls
- Reduce your heating costs

How Does MVHR Work?

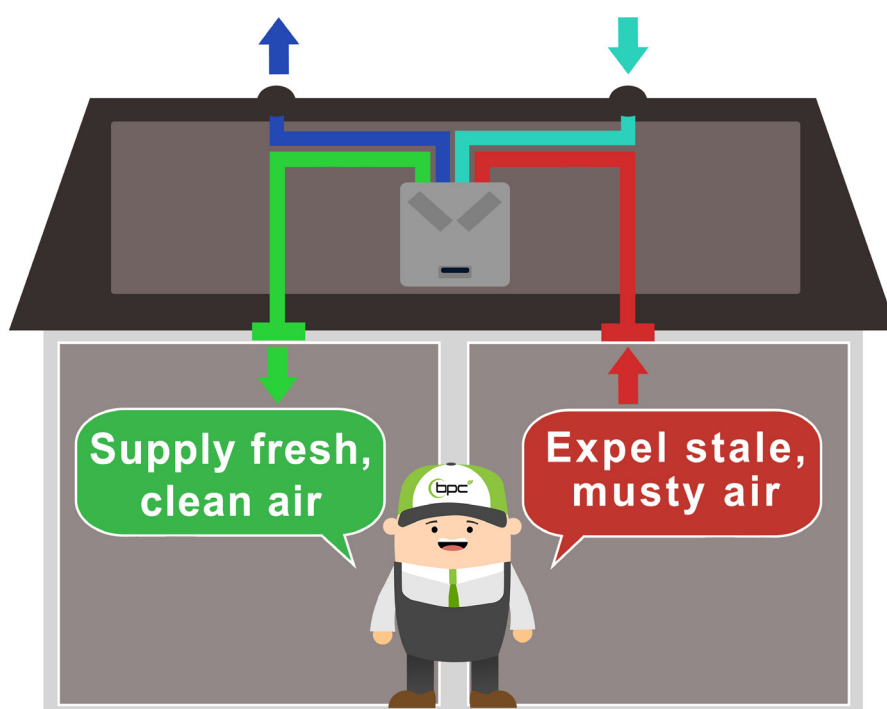
A heat recovery ventilation system works by extracting moist and stale air from wet rooms in your home, it recovers the usually lost heat from the extracted air. It also supplies clean, filtered fresh air that is heated from the recovered warmth of the extracted heat.

Rather than just extracting air and replacing it with the air from outside, a heat recovery system draws the heat from the extracted air and passes it to the air which is being filtered in from outside. The extract and supply air do not flow within the same pipes and there is no cross contamination of the different air flows. The heat recovery unit is connected to room air valves via a network of ducting throughout the building.

With heat recovery systems, you make use of what already exists as well as reduce our collective impact on the environment, and that includes the amount of heat we lose to the environment daily. Heat recovery systems work by using the valuable warm air or water in a property and use it in a positive way.

The two airflows pass one another within the heat recovery unit without mixing physically, the heat from the extracted air is then transferred to the new fresh air brought from outside and supplied through the pipework and into each room. Once the stale air's heat has been extracted and it is then extracted out and into the atmosphere.

For health reasons, Government legislation now makes it almost compulsory for your new air tight home to have a balanced mechanical ventilation system and a heat recovery ventilation system is the most preferred option.



Things to Consider Before Purchasing your Ventilation System

Where to place your unit is one of the key things, it needs to be somewhere that is accessible for maintenance such as filter changing, and you may need access to the control on the front if it has one. The most popular placement of a unit is attics/lofts, an unused cupboard space plant room, or if suitable a garage.

Units must be in a centralised location so that ducting can reach the whole building so the system is not being over worked to push air to the furthest points.

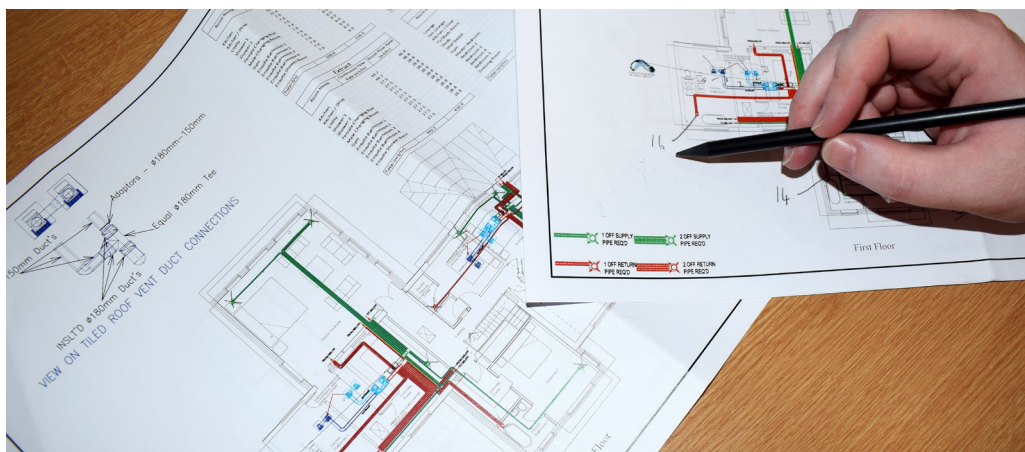
Ducting placement is just as important as the placement for your unit so that your system can work to the best of its ability. Ducting is incredibly important for the system as it carries the new, filtered fresh air to habitable rooms in your home, and another set of ducting pipes carries the extracted air back to the ventilation from the wet rooms of your home including kitchen, bathrooms and en suites.

By getting a design done, it will ensure that you system is property designed directly to your project with unit placement, duct runs and valve placement all clearly marked.

Ventilation Design Service

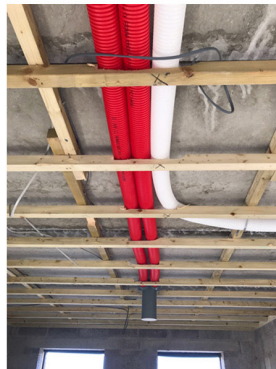
We make sure that you get the right size of unit for the size of your home so that your system is not over worked or so that your system is correctly tailored to your application.

By sending us your plans it will ensure that you get the correct system for your property so that your unit will provide the correct airflow for the size of your project and how many rooms in your home.



Installation

MVHR systems are suitable for installation in all types of building. The best time to install a ventilation system is at the time of the building but systems can also be retrofitted.



Maintenance

By regularly maintaining your ventilation system you will increase its lifespan and improve the effectiveness of your ventilation system, by checking your system regularly you will avoid bigger complications further down the line.

A MVHR unit, like any other building service, requires maintenance and servicing throughout their lifetime to ensure consistent energy efficient ventilation is provided to the home.

Filters are fundamental to guarantee installation performance, efficiency, and indoor air quality (IAQ) and should be cleaned or replaced every 6-12 months.

Most maintenance jobs can easily be done by an owner, electric work must be carried out by a trained electrician.

Types of MVHR Systems

MVHR systems are available in many configurations to suit your building that include wall mounted units, horizontal floor units and ceiling mounted units.

The most popular type of heat exchanger is one that uses a counterflow heat exchanger as they have a better heat recovery, less power consumption and the air streams cannot mix.

MVHR systems that we have available include:

- Single room heat recovery
- Domestic heat recovery with options for small and large dwellings
- Commercial heat recovery

Heat Recovery FAQ's

Does a heat recovery system save me money?

Heat recovery systems are designed to recover on average 90% of the heat normally lost through open windows, trickle vents and other break-out points i.e. extractor fans. The systems will through time, off-set the heating costs and reduce energy bills, making it a worthwhile investment.

You could lower your heating costs by up to 30% against using window trickle vents and bathroom fans and improve the indoor air quality with fresh filtered air.

How often do I need to change the heat recovery system filters?

Depending on your house location, the filters usually only need to be cleaned or changed every 6 months to a year.

How much does a heat recovery ventilation system cost?

The cost depends on the size of house, the number of extraction and distribution points required, and the air volume rate required for the house that determines the size of unit. We will design a bespoke system for each and every house with the choice of various available units to suit your budget and property.

Is a heat recovery system expensive to run?

With the newest generation EC low energy fans fitted, running costs are very low and are approximately the equivalent of a light bulb to run.

The main part of a heat recovery system is the counter flow heat exchanger which itself requires no power, the only power required is for the small fans to push the air around the house, power usage is very minimal and average annual cost can be as low as £20 to £30 and as most units recover on average 90% of the normally wasted heat any expenditure is easily offset.

How can I ensure compliance with current building regulations with a heat recovery system?

All our systems are designed to comply with all building regulations and help improve SAP / BER ratings. It is required by Building Control to have the ventilation system commissioned; a service provided as standard for all installations by BPC. When we provide a proposal or plan, we can provide airflow rates that will satisfy building control.

What is a Passive House approved heat recovery unit?

A passive house approved heat recovery unit has to be tested under stringent examination to fulfil a German standard.