

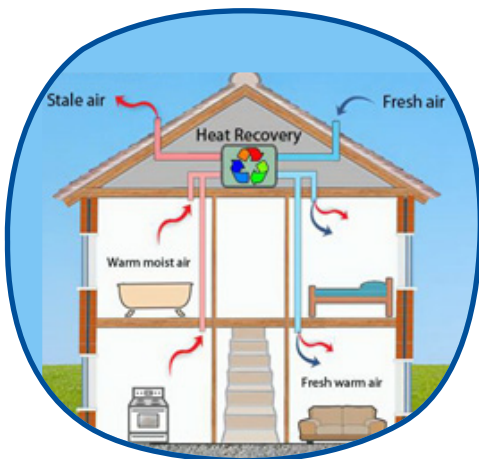
Your guide to MVHR

What is MVHR?

A Mechanical Ventilation Heat Recovery unit (MVHR) can significantly improve the energy efficiency and comfort of your home as well as the health of those living there. Your home is unique as the upper bedrooms will be heated via the MVHR system and they don't need radiators. This should help reduce the amount of gas central heating that you use, and help keep your fuel bills low, as well as being kinder to the environment.

How does it work?

The MVHR system in your home will collect stale, moist air from the kitchen, bathroom, utility room and downstairs loo. This stale air passes through the MVHR unit and is pushed outside. At the same time, clean fresh air is drawn in from outside, as the two air streams pass each other. This creates warm air which is pushed back into your home in the dining room, living room and upstairs bedrooms.

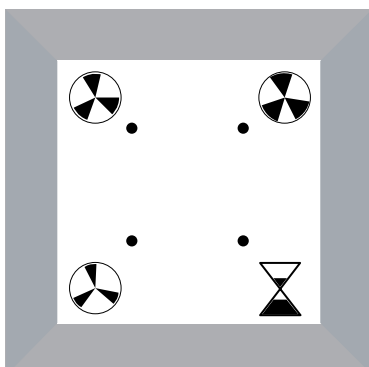



Why no radiators in your bedrooms?



The recommended temperature for being comfortable in your home is between 18-21 °C. The upstairs of your home should always be cooler than downstairs, around 17-18 °C. As heat travels upwards, along with the insulation of your home and with the additional warm air from the MVHR, this should supply enough warmth for you to live comfortably in the upstairs without the addition of radiators. Less radiators to heat = lower running costs

How to work it


Your home has three panels to operate control panels the MVHR. These can be found in the kitchen, utility room & bathroom. They control the whole of your home, for example, if someone has jumped in the shower upstairs, but forgotten to BOOST, then you can use the control panel in the kitchen.



 **LOW (trickle speed)** is the setting the MVHR should be on most of the time.

If you are using any of the rooms from where the air is extracted, such as the kitchen, utility room, or bathroom, then you can select a different speed by pressing  **MIDDLE** or  **BOOST**.

YOU MUST REMEMBER TO PRESS LOW AFTER USING MIDDLE OR BOOST MODES OTHERWISE IT WILL STAY IN BOOST MODE. When you select MIDDLE or BOOST, you will hear the MVHR become slightly louder.

An easier option is to use the  **Timer function**. Each press means 10 minutes of boost, for example, if you press twice boost will run for 20 minutes. After this time the MVHR will automatically go back to its former speed, so if this was MIDDLE it will go back to MIDDLE.

What maintenance do I need to do?

There is no maintenance needed for the air vents situated in the ceilings around your home. However, you must not adjust these as they are set in balance with the MVHR system and if changed will stop it from working efficiently. **You will need to clean the filters within the MVHR system on a monthly basis. This is to help keep the air clean and keep the system working properly.**

To clean the filters

- 1) Remove the two plastic covers on the front of the MVHR unit
- 2) Gently remove the filters from the MVHR Unit



- 3) When you pull the filter out you will see it covered in dust
- 4) Simply clean the filter with a vacuum cleaner Replace back in the MVHR and Replace the plastic covers.



Helps with condensation

As your home is a new property it has been built to meet certain specifications. The insulation of your home is very good. This is great as it helps keep you warm in winter and cool in summer. However, as with all highly insulated properties, this will mean a reduction in natural ventilation. If a home has no ventilation, then condensation can form.

Heat recovery systems are able to help tackle condensation.

Some of the things that create moisture in the home	Pints of water produced
2 people at home for 1 day	3
Cooking and boiling a kettle	5
Having a bath or shower	2
Washing clothes	1
Drying clothes	6

A typical household of four people produces around six pints of moisture per day, simply by breathing. When this moisture in the air comes into contact with a cooler surface, such as walls or glass in a window, it condenses to form water droplets. This moisture can be a serious issue as it can result in mould growth as well as the creation of dust mites. Mould growth can cause unsightly marks on the walls, which require regular cleaning. If left the moisture can penetrate into the structure of the building and cause costly repairs – a house smelling ‘musty’ is one of the signs you have a condensation and a mould problem.

Having the MVHR system in your home is one of the most effective ways of reducing humidity and helps minimise condensation, at the same time addressing the problems associated with mould growth and dust mites.

Healthier homes, healthier living

MVHR Systems can help sufferers of hay fever. An MVHR system circulates fresh and, crucially, filtered air throughout the property. The MVHR systems are fitted with filters that are so fine they will extract particles and pollen (great for hay fever sufferers) as well as the dust and grime of outside pollutants.

Fitting an MVHR system can help asthma sufferers. It does this by lowering the humidity in the home, which limits dust mite numbers and therefore the airborne allergens they produce. House dust mites are a real problem for many sufferers, particularly in houses with damp conditions caused by poor ventilation.

One in eight children suffers from the condition in the UK. Studies by Strathclyde University Cedar Centre have stated that they regard poor indoor air quality as a major (if not the primary) cause of childhood allergic asthma. This is something that the MVHR system can help prevent.

Cost

A unit uses approximately 22 watts per hour. This is less than leaving a TV on standby overnight.

Can I open the windows?

Yes you can and the MVHR system will continue to operate in the background. However, the efficiency of the MVHR will be reduced and it will affect the ability to keep the building warm in winter.

Does the system run 24/7 for 365 days of the year?

It is set for automatic lower speed use all year round. Apart from when the boost function is manually activated.

Drying clothes

Drying clothes indoors add moisture to the internal air. It's always best to dry clothes externally. When this is not possible use a maiden in the utility room where the boiler is located. Never drying clothes on the radiators, as to work well radiators need to have air circulating. The boiler will provide additional heat and if you leave the utility room door open and the adjacent door which leads to the downstairs toilet, this should give enough ventilation to help dry the clothes. You can always open the downstairs toilet window too if you are at home. When the clothes are drying.

What will happen if the electricity supply is cut off?

You may start to feel that the air is becoming a little stale. In the unlikely event that it happens while you are asleep, your bedroom might seem a bit stuffy in the morning. When the electricity supply comes back the MVHR will turn on automatic.

Frost protection

In case of very low outside temperatures (below -1 °C), the fan motor will automatically go into frost protection mode and switch off to avoid a frozen heat exchanger. It will restart itself after the temperature has risen.



If you are unsure about anything please email environmental.team@greatplaces.org.uk