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## The benefits and costs of running a MVHR System\*

Enjoy benefits to your health and your home with a Mechanical Ventilation Heat Recovery System:

- Improves indoor air quality
- Recovers up to 95% of the heat of the extracted air\*
- Can help to off-set heating costs and reduce fuel bills



If you have a very airtight home, then you should save money on your heating bills with an MVHR system, as it recovers heat and flows it back into the property. It costs approximately  $\pounds 15 - \pounds 40$  per year in electricity to run an MVHR system constantly. However, you might save a lot more than that on heating bills because it is recovering up to 95 per cent of the heat that would normally be lost to leaks and draughts in the building fabric.

Without good ventilation in the home, moisture will settle on windows, walls, and other cool surfaces. Condensation will quickly lead to mould formation.





### Help and Support:

If you would like further information on

how to reduce condensation in your home

or to report damp,

please visit our website

www.radiushousing.org

Alternatively you can contact our office on

0330 123 0888

Head Office: 3-7 Redburn Square Holywood BT18 9HZ t: 0330 123 0888 e: info@radiushousing.org









### Understanding **MVHR Systems** in your home

### Let's get it RITE Report / Inspect / Treat / Educate

These are average estimates based on scientific research, are used for illustrative purposes and will vary in different conditions, situations and makesw and models of equipment. **Everyone has a place** 

## Let's get it RITE with Domestic MVHR Systems

Mechanical Ventilation with Heat Recovery (MVHR) is a whole house ventilation system perfect for today's modern homes where comfort, energy efficiency and health and well-being are on the agenda.

#### How does a MVHR system work?

A MVHR system is a whole house system that runs continuously throughout the day. The system is mounted in a cupboard, in a utility space or sometimes in the loft.



It is ducted throughout the property to each room - you will see an air valve in the ceiling (the ducting will be concealed in the ceiling void). The system extracts and supplies air.

It extracts air from the bathrooms, kitchens and utility rooms (known as 'wet' rooms) and takes the stale, moisture and odour laden air to the outside. As this air is extracted it passes through a heat exchanger that recovers up to 95%\* of the heat in the air.

At the same time as the extraction of air, replacement or supply air is being brought in from outside. It passes through a filter and the heat exchanger where it picks up and re-uses the heat - the air is then supplied to the living rooms and bedrooms. This creates a balanced and continuous level of ventilation into the home. When outside air temperature increases, the heat recovery mode is switched off and the unit goes in to 'summer bypass mode' this is to avoid additional heat being passed into the home, further increasing the internal temperature.



### **Modern houses and airtightness**

New homes that are being built are designed to be much more airtight that older houses; reducing the amount of drafts and gaps in the house makes it cheaper to heat and more comfortable to live in. However, these newer, more airtight homes require ventilation to allow air to circulate, especially in 'wet' rooms (e.g. kitchens or bathrooms).

For this reason, it is very important that if your home is equipped with an MVHR system that you keep it switched on at all times. As mentioned overleaf, the running costs per year are very low, but the MVHR system only works effectively if it is switched on at all times – this is because it runs in 'passive' mode, and switches to 'active' mode only when it needs to remove damp air. If you switch it off, it can actually cost more to run over the year, because it has to run more intensively to remove damp and stale air.

### Helps stop mould formation

If the MVHR switched off, mould growth may form on walls and ceilings – this is because the damp and stale air in the house is not being filtered out of the home. You should never switch off your MVHR system. You should never cover vents up as they are essential for keeping the home properly ventilated with fresh clean air and will help manage moisture in your home.



Report / Inspect / Treat / Educate



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