

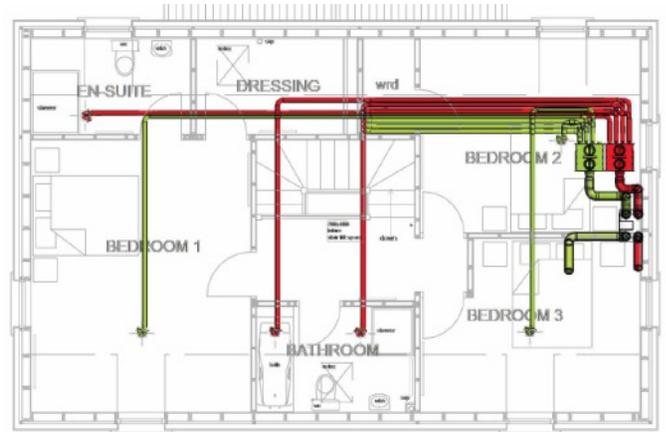
## Ventilation

In modern houses where air tightness now forms a critical part of meeting building regulations, the need for ventilation is paramount for maintaining air quality. It is important for the health of the occupants that CO2 levels are kept within safe limits, and fresh air is constantly cycled.

### Mechanical Ventilation with Heat Recovery

Mechanical ventilation with heat recovery (MVHR) is a whole house ventilation system that pre-heats incoming fresh air using the residual heat extracted from warm rooms such as bathrooms, kitchen, utility, and rooms with additional heat sources, such as a wood burner.

By maintaining good air quality, the risk of condensation is eliminated. MVHR is not only healthy for the occupants, but also for the building itself. The air handling unit would normally be located in a utility cupboard, or possibly in an insulated loft space, and the occupants would be unaware of its presence as it is virtually silent.



Warmed incoming fresh air is distributed to living rooms throughout the house via flexible ducts installed in the joists and ceiling voids. MVHR constantly cycles air throughout the building to maintain air quality automatically, or according to a choice of set programmes.

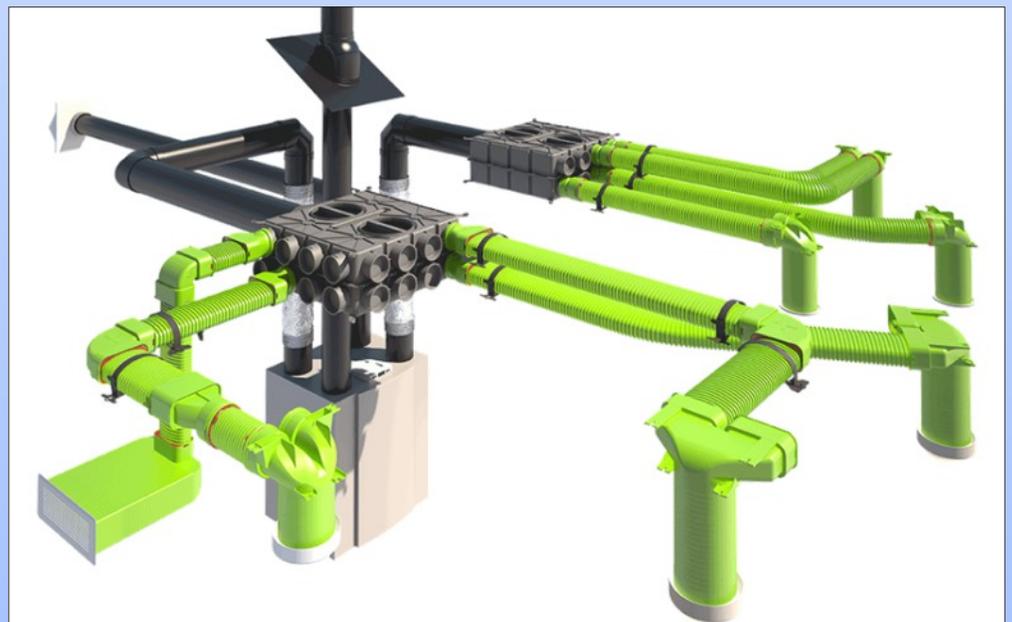
With a properly designed and installed MVHR system there is no need for trickle vents on windows or to have windows open, thereby avoiding draughts and losing heat.

### Sensors

The systems we install use sensors to detect increases in Co2 and humidity. Being sensor driven makes the system more energy efficient because, thanks to its intelligent sensors, it will only ventilate when necessary.



Distribution boxes.



**We put our energy into your comfort.**

# We won't compromise on quality

## Benefits of MVHR

**Energy Efficiency** – MVHR recovers and reuses up to 95% of the waste heat within your property. All of the units we install are passive house approved.

**Alleviates Allergies & Asthma** – As the incoming fresh air is filtered, allergy and asthma symptoms are reduced.

**Controls Condensation** – Also prevents damp and mould growth to ultimately improve indoor air quality.

**Tackles Unpleasant Odours** – The fresh air from the MVHR system will tackle everyday strong odours, for example from cooking and pets.

**Reduces Noise Pollution** – Fresh air will circulate within your home without the need to open windows.

**Heat Pump Size** – Because the MVHR system is moving already warm fresh air around your home we take account of this when calculating the size of heat pump your home needs. The contribution made by the MVHR system can reduce the size of heat pump required.

This image shows external vents protruding through the roof but it is preferable to fit vents through the external wall.



Plant room with MVHR, DHW cylinder and UFH.



Ubiflux Touch Control.

## Our Experience and Expertise

- ◆ We are self-build specialists with an in-depth knowledge of integrated heating systems.
- ◆ We are MCS accredited to install ground and air source heat pumps.
- ◆ We care for every project as if it were our own.
- ◆ We use quality products and equipment with excellent guarantees.
- ◆ We provide a bespoke design service to suit your project.
- ◆ Our installation photos are used in our suppliers' manuals and training literature, and have also been used in various building magazines.
- ◆ We offer advice and support from the planning stage, right through to completion and beyond.
- ◆ We provide an unrivalled after sales service.

*Thank you for considering our company.*

*Simon & Pauline Currie*



Borders Underfloor Heating Ltd.  
26 Coopersknowe Crescent, GALASHIELS, TD1 2DS.  
Tel: 01896 668667 [www.bordersgreenenergy.com](http://www.bordersgreenenergy.com)  
[bordersgreenenergy@btinternet.com](mailto:bordersgreenenergy@btinternet.com)  
VAT reg: 789 0284 85 Company reg: Sc301968  
MCS reg: NAP 14681  
**We leave our clients with a warm feeling.**

**MVHR installers since 2006.**

