



Radiators vs. Underfloor Heating: The Pros & Cons

Traditionally radiators have been the most popular choice for homes and businesses - since cast iron radiators were used in Victorian times. However, underfloor heating is fast becoming the most popular option for new building and property refurbishments. A basic method was used in the Roman times and today the advanced technology is the most energy efficient method of heating a room. As a result, more trade professionals are being asked to install UFH. It is really important that you use a trained professional to install your underfloor heating. Installed well, it can lower your heating bills, get it wrong and you could lose heat and money.

Our main advantages and disadvantages of radiators vs. [underfloor heating](#) are:

Energy & the Environment

An underfloor heating system is much more energy efficient than radiators using on average 15-40% less energy than conventional radiators, as it operates at a lower heat while evenly spreading the heat around the room (between 35°C and 60°C - most commonly around 50°C). Whereas radiators work at a higher temperature to ensure heat reaches the opposite side of the room (around 82°C) and therefore use more energy.

Depending on the type of floor, underfloor heating ensures that heat loss is minimised. It radiates heat upwards from the floor and heats other surfaces in the room which then radiates a secondary heat and keeps the underfoot warm while eliminating floor draughts. Radiators don't distribute heat evenly – naturally the warmest part of the room is the ceiling and the coolest is the floor; which results in an inefficient way of heating a room.

The most energy efficient type of underfloor heating is wet underfloor heating as opposed to the electric systems. The only disadvantage to wet underfloor heating is that in existing rooms the floor may need to be raised if the pipes won't fit underneath the flooring.

Due to the lower energy requirements UFH can run off [solar panels](#), using a solar thermal system or heat pumps. This means that it lowers your carbon footprint.

Costs

Underfloor heating can initially be more expensive for the outlay however it does repay in the long term with high energy savings. If used with a source of renewable energy like solar panels then it can be extremely cost effective.

Speed, Reactiveness & Consistent Temperature

Radiators can quickly heat a room within 20 to 30 minutes and will get hot in 3-4 minutes, however they cool down fast. Whilst underfloor heating can take 1 to 2 hours to heat a room thoroughly because water is heated through a network of pipes, ensuring that the heat is evenly distributed. [Sensors and Thermostats](#) are wired into the systems, this means that it can be programmed to heat all day, ensuring that the temperature doesn't drop below 16°C and it takes longer than radiators to cool down. This makes it ideal for buildings which are occupied all day and night like some offices or busy households.

Aesthetics

Underfloor heating is ideal for modern, open plan living. Radiators can be bulky and ugly, no radiators on the walls means that there is more room for experimenting with interior design.

A Healthier and Cleaner Option

A radiator's primary function is to distribute warm air via convection currents supplemented by warm air. This means it picks up dust from the floor and sends it into the air and also collects within the radiator and behind. Underfloor heating does not have this problem, making it a healthier choice for everyone particularly sufferers of Asthma and dust allergies.

A System to Suit your Project

We at UFH1, want you to make the right decision for your project, whether that is choosing radiators or underfloor heating. If you do decide to go with underfloor heating then we aim to ensure that you receive the right system for your project by understanding that each installation is unique and has different variables. We have a system to suit a new-build, renovation, modification to one room or a re-fit; we have a solution for every project.

Underfloor heating works with all types of floors, tiles/natural stone, vinyl, engineered wood, solid wood and carpet.

If you would like to any further information on underfloor heating further with a member of our team, please contact us on 01302 276199 or at sales@underfloorheating1.co.uk.