

# Tile & Floor

— DESIGN · SOURCE · CREATE —



## *Tips article:*

# All you need to know about underfloor heating

**U**nderfloor heating is a clean, smart way to heat your home. It warms the room and the people in it – directly from the ground up. The principal was invented by the Romans who built houses with interconnecting voids under their floors. A fire was lit in the basement - hot air rises, and so it circulated into these voids, warming the rooms above. *Peggy Braybrook*, our Design Centre Manager, shines a light on today's solutions.



## The options

There are two types of radiant heating– electric or water. Water or 'wet systems', as they are commonly referred to, run hot water through pipes to warm the floor; electric systems work on the same principal heating wiring under the floor's surface. And taking radiators out of the equation means that you'll automatically have more wall space, which gives you greater design flexibility.

## The pros of underfloor heating



-  Efficient way to heat the whole room
-  Sustains consistent room temperature
-  Low maintenance
-  Electric systems are easy and quick to install
-  Works with most floor coverings
-  Maximises space

## More energy efficient

Traditional radiators need to reach a high temperature (around 65-75°C) to heat a room. In general, people set their systems to heat in the morning and evening which means the boiler has to work hard to achieve the temperature set, repeatedly.

Floor heating, however, only needs to run at around 27°C to achieve a comfortable ambient temperature in a room, and can be left on to sustain this consistent heat without working as hard. With energy bills rocketing, this can make a difference.

The spread of heat also means that there are no extremes of hot spots right by the radiator and cold spots in the middle of the room, where you sit!



## Water or electric systems - which is best?

Water-based systems are more expensive, and can be disruptive to install, but are expected to cost less to run in the long-term. Electric systems are really straightforward to install as they can be laid on top of existing substrates and don't need plumbing into the mains. If you are renovating room by room this is much more flexible.

So which is the cheapest to run long-term? The most straightforward way to understand this is to compare the kWh cost of gas or /Litre cost of domestic

fuel oil (for a wet system) vs electricity (for a wired system).

You can use the same flooring materials with either system, so a simple way to decide which system to install may be to look at the size of the area. If it's a large area, such as an open-plan kitchen/living area, then a piped system will be better, as running underfloor heating in a bigger space will cost more.

However, for a small area such as a bathroom, an electric system is preferable, as you can isolate it on the thermostat, and just heat that particular room for your morning shower!

## Easy to install and use

Underfloor heating is suitable for both new-build and renovation projects. Depending on the size of the room, electric systems can be installed in

1-2 days. A water-based system takes slightly longer and will cost more – however, this may be offset by its lower running costs in the long-term and the fact you have a building team onsite anyway.

Electric systems are easy to use – you can now control them via an app on your phone. A piped system can be combined with your central heating system and controlled via thermostats.



## Which floor coverings are suitable to use with underfloor heating?

Put simply – nearly everything.  
A headline review of the options:

### *Porcelain, ceramic & stone tiles*

Stylish, hardwearing and with the highest thermal conductivity, combine ceramic, porcelain or stone with underfloor heating in your kitchen, bathroom, boot room or utility to take the chill off what could otherwise be a cold floor. You can tile directly over underfloor heating.

### *Engineered wood*

All our engineered wood can be used with underfloor heating, making it a great choice for any room. If you'd like a herringbone look, then only engineered timber parquet should be used over underfloor heating to allow for movement. Remember to let the flooring

acclimatise in the property before fitting to avoid expansion or contraction post-installation which may cause lifting of the joins.

### *Luxury vinyl tiles*

Smart, durable and affordable, vinyl paired with underfloor heating is ideal for well-insulated rooms with lower heat requirements. Our high-quality luxury vinyl offers both contemporary and classic looks, from stone to wood. Always check the manufacturer's recommended maximum floor surface temperature to ensure it's suitable for use with underfloor heating.

### *Carpet*

We're often asked if you can use carpet with underfloor heating. You can but the recommended combined tog for effective heat transfer is no more than 2.5. We therefore recommend a Wool Boucle with a hessian backing and tog rating of 1.6 combined with an underlay of tog 0.8.



We supply **Warmup**, which offers an extensive range of electric and water floor systems.



For expert design, product and installation advice, make an appointment at our Design Centre or speak to a specialist on the phone. We'll advise on options for any scheme, style or budget.



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