

HOME IMPROVEMENTS UNDERFLOOR HEATING

The Daily Telegraph

Get to the heat of the matter

Underfloor heating gives you an even, energy-efficient temperature and space to play with, reveals **Sara Emslie**

Although it may sound like a modern-day luxury, underfloor heating in homes is nothing new. In Roman times, underfloor channels were employed to create a warm air convection system that would heat the space above it.

And despite radiators having undergone something of a transformation recently in terms of style and design, underfloor heating is steadily becoming a serious contender among consumers and home builders. Kelly Butler of the Underfloor Heating Manufacturers Association (UHMA) estimates that about 7% of all new builds are now automatically kitted out with underfloor heating; a significant increase from the 4% five years ago.

The reason for this is simple. In our increasingly eco-conscious world, builders are responsible for meeting certain carbon targets with new builds, and underfloor heating wins hands down. Butler suggests that an average home can save between 15-40% of energy by using underfloor heating rather than radiators, assuming the system has been correctly installed.

But the main benefit is that it heats from the floor upwards, allowing an even distribution of heat and thus maximising comfort levels. Heat from radiators corrects directly to ceiling level, leaving the temperature at floor level much lower. And unlike radiators, underfloor heating does not need to run at high temperatures. To obtain a cosy 77-82°F (25-28°C) underfloor system would run at about 113-140°F (45-65°C) as the heat is released across a large surface area.

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The Celtic Sheepskin Company
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The White Company
0845 678 8150; www.thewhitecompany.com

Underfloor Heating Online Magazine
www.underfloor-heating.co.uk

A radiator, meanwhile, offers a more localised source of warmth, so has to give out a higher heat – often as high as 170°F (80°C) – to ensure the air rises and circulates the room. There are two main types of underfloor heating, which means you need to consider where in the house it is intended for, and under what type of surface. The wet system takes water from the central heating system and pumps it around lengths of plastic pipes laid onto a sub floor. This makes it ideal for rooms where it is possible to take up the existing floor or where new floors are being constructed, such as new builds, extensions and conservatories.

Electric underfloor heating (dry system) consists of cables embedded in open-weave mesh mats, which are then connected to the thermostat and mains power supply. They create less disruption to the existing floor structure, making them a good choice for upstairs rooms.

Obviously, the installation itself can be disruptive, as the very nature of underfloor heating means that in every case, apart from new builds, the existing floor will have to be dismantled. And cost is also a consideration: although the long-term savings are attractive, the initial outlay can put some people off.

According to the dedicated online magazine underfloor-heating.co.uk, the cost of underfloor heating is in the region of £10-£12,000 for a 250sq-metre, four-bedroom house, depending on which system you opt for.

To ensure you choose the appropriate method, consult a professional for advice and



installation. When selecting your flooring, check with the manufacturer that it is suitable for use with your choice of heating system. Some carpets are too thick and insulate the floor, rather than allowing the heat to rise. And some underlays are better than others: one with a waffle back, unlike a felt or rubber underlay, allows the heat to travel through the air spaces.

If you opt for wood, bear in mind that this natural product can crack and shrink when the

“The system can save the average home around 15% to 40% of energy

moisture is sucked out of it, but certain types are manufactured to be compatible with underfloor heating. As for stone and ceramic tiled floors, underfloor heating means you can have warm feet even in the bathroom.

Companies such as Fired Earth offer various methods of electric underfloor heating, including one specifically designed for bathrooms. All methods are compatible with Fired Earth's entire range of floor tiles, so you don't have

to compromise on aesthetics for the sake of comfort.

With all underfloor heating the visual benefits are enormous. Since the heating supply is sealed under the floor, all room space can be put to good use. You can configure furniture how you want without the risk of blocking the heat source, and without an unsightly radiator becoming the focal point.

However, there are also other, more simple solutions to adding warmth underfoot. If your floors

are natural wood or boards, ensure any gaps are filled and that beading is placed around the skirting to block draughts. Invest in large rugs and perhaps a stair runner to add warmth to bare treads. Treat the rugs as you would carpet, and add a layer of underlay. Choose natural fibres and textile textures for added comfort and warmth.

Crucial Trading offers a bespoke rug service in a choice of woods and a variety of colours and textures from £38 per