



See us  
at the **bre**  
Renewable  
House

# Warmup

The world's best-selling electric floor heating brand™

Easy to buy,  
Easy to install  
Job done!!

As part of your new build or refurbishment project, perhaps you are now at the stage where you are considering heating and you want to ensure that you are specifying or installing the most effective heating solution.

The objective of this leaflet is to introduce you to Warmup Plc., our electric underfloor heating portfolio and provide you with all you need to know to make an informed decision.



Electric



Energy  
Efficient



Global

## The advantages of Warmup electric underfloor heating

When it comes to underfloor heating there are 2 main choices, water based and electric. For CSH Level 4 homes, our research shows that electric is more effective than water for the following reasons:

- 1 Lower CO<sub>2</sub> emissions**  
Electric systems have approximately 30% less embodied carbon than the equivalent water systems.
- 2 No wet trades**  
Warmup electric systems are placed above the insulation layer prior to the flooring being laid directly onto it. This makes it an easy and fast way to lay the system and apply the finished floor, resulting in a reduction in costs with less things to go wrong and no time wasted.
- 3 Rapid heat-up time, off most of the time - therefore energy efficient!**  
Warmup electric heating works by directly heating the floor surface with a much higher wattage density per square metre than water systems. Unlike water systems, Warmup does not need to heat a concrete screed; this provides rapid heat-up times that never overheats or wastes energy.  
  
Additionally, fast heat-up time means there is no need for a "set back temperature".  
  
Warmup operates a 'live' test house in Berkshire (470 sq metre CSH 4 house with a 4 person family – see opposite page for case study), which found that it used the Warmup system for whole house heating for only 4.4% of the time from October 2010 to September 2011. Additionally, through a self learning process, energy costs in October 2011 were 55% less than October 2010.
- 4 Precise heat control with Warmup 3iE energy monitor thermostat**  
Warmup electric heating delivers precisely the heat required. Our 3iE thermostat has one of the most precise algorithmic controls to ensure the desired temperature is delivered.
- 5 Fully zoned system**  
Our electric heating produces zero wasted energy. There is no need to transport heat from boilers to the place where heating is required through trunk piping. This means that water systems cannot deliver precise heat control to individual zones.
- 6 Maintenance free!**  
Our wire is guaranteed for the life of the floor, this means no radiators to bleed, mend or replace or boilers to service/replace.
- 7 Invisible**  
No radiators to take-up valuable wall space, or spoil the clean look of a room. No cupboards to hold large manifolds and pipework.
- 8 Products guaranteed for life**  
Warmup's heating wire carries a Lifetime Warranty plus a unique SafetyNet installation guarantee (if the wire is accidentally damaged, the pre tiled heater is replaced free of charge – this is unique to Warmup).



## Healthy living – in air-tight houses

The reduction in air movement with underfloor heating means dust circulation is minimised, leading to an allergy free environment. This is an important feature for those who suffer from allergies and Asthma and absolutely critical in low air movement dwellings consistent with CSH 4 and 5 air-tightness.

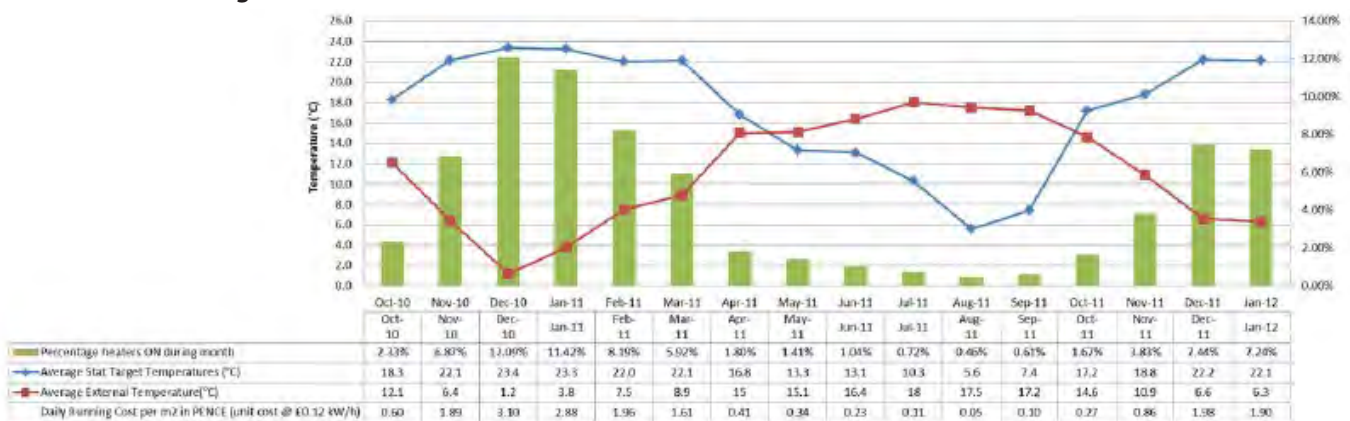
## Berkshire Farm Case Study: Reinforces Warmup as the solution of choice for underfloor heating

Berkshire Farm is a £2.2m new build basement plus 2 story timber steel construction. Warmup successfully won the heating tender based on a number of factors including its ability to deliver economical systems, zoned and highly controllable.

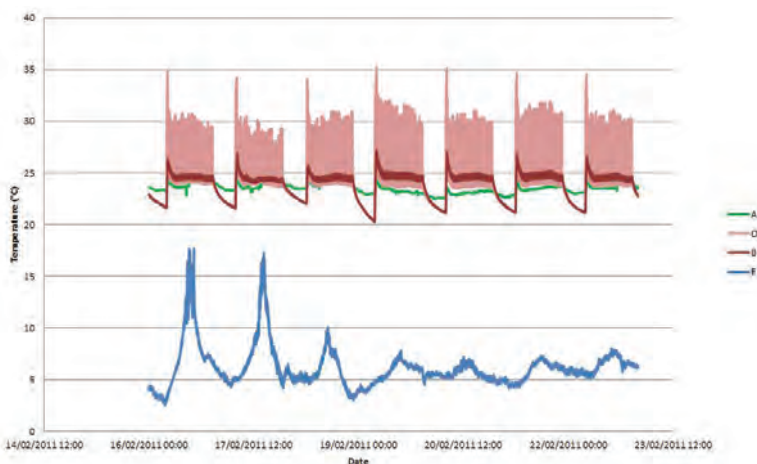
Warmup has been granted permission to use Berkshire Farm as a 'live' test site. As a result, Warmup monitors all temperatures and energy consumption under real conditions using Warmup heaters as the main heat source.

The chart below is an example of the precise measurement of running costs:

Average time heaters ON (%) v thermostat settings



### Energy monitoring - sample Winter week



This data is recorded by 2 Agilent reading modules using 49 sensors, which record the external average temperature and temperature in 3 key places of each room in the house every minute:

- On the heating wire (C)
- Between wires – emulating floor sensor position- (B), and
- Air temperature of the room –emulating stats air sensor- (A).
- External temperature –recording outside temperature- (E).

This ongoing study proves as a new code level 4 house that it has a very low requirement of energy (< 20W per sqm) and we estimate that annual running costs are between £2.50 - £3 per sq. metre per year.

That thermostatically controlled Warmup systems provide the exact amount of energy required and can be zoned to where heat is required, which reinforces Warmup as the ideal solution for underfloor heating.

## About us

Warmup is the world's best-selling brand of electric floor heating.

Warmup is a UK based manufacturing PLC creating and delivering electric heating solutions for 17 years. We have established operations in 9 countries and licensed trading partners in 10 others.

The combination of our heating wire with fluoropolymer coatings and 3iE energy monitor thermostat is patented, trade mark protected and world-leading.

Warmup began and remains a knowledge and research-driven UK manufacturing business, making proprietary, world-leading products that are tested in our 3 EN442-2 based test facilities in Germany.

See us at the BRE Renewable house.



## A tradition for quality and innovation

As part of our innovation programme, Warmup constantly updates and adds to our product range to deliver the absolute best products.

Warmup has won many awards for quality and innovation including "Exceptional Manufacturer of the year 2007" from the UK Trade & Investment.

Warmup's products are CE compliant, marked and accredited by more institutions than any other manufacturer, to provide complete quality assurance. These include:



## Next step – contact us

We would like to have the opportunity to quote for your business and to demonstrate to you how Warmup is different from others. We would therefore invite you to contact:



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