



heatwave
underfloor heating



www.heatwaveunderfloor.co.uk

01269 833 105

A little bit about UFH

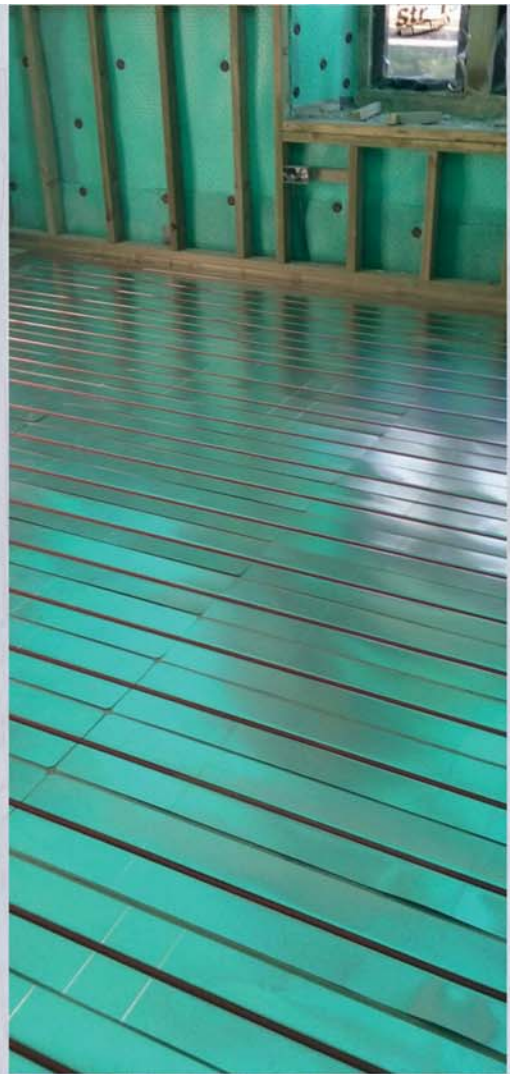
Underfloor heating (UFH) is not a new form of heating - the Romans used it thousands of years ago! Due to material and technological advances, UFH is now more practical, efficient and affordable than it has ever been. It will maximise space in your home whilst providing an effective and efficient heating solution. Unightly radiators will soon become a thing of the past.

UFH is a very efficient form of heating as it works in harmony with the natural behaviour of rising warm air. UFH is spread out across the floor, heating from the ground up. Pipe is laid over the whole floor in a designed and calculated pattern. This ensures that the whole room is heated evenly and creates a comfortable environment. Each room is individually controlled, allowing you to set a temperature suited to the room, or turn off the heating in rooms which aren't being used. UFH requires lower water temperatures than radiators to create a comfortable warm environment. A lower input water temperature means that the boiler does not need to use as much energy, thus reducing the cost. Lower water temperatures make UFH ideal for use with Heat Pumps.

Underfloor solutions are suitable for domestic and commercial applications. We use the latest multi layer pipe constructed from cross-linked polyethylene (Pert-Al-Pert) sandwiching a layer of aluminium. This provides supreme strength and, unlike PEX or PB pipes, is guaranteed to be 100% oxygen impermeable. The pipe has a design life in excess of 50 years, with higher operating temperatures and pressure parameters than PEX or PB. The inner core ensures zero maintenance as it is highly resistant to all forms of corrosion. This means you need never be concerned about what is under the floor.

Features and Benefits

- Heatwave UFH reduces air borne circulation of dust & dust mites, creating a healthier and cleaner environment.
- Heatwave UFH is a low temperature system making it perfect for renewable hot water sources such as Heat Pumps.
- Cleaning floors is easier as wet floors dry quickly when warm.
- Hot air rises, which is why heating from the ground up is the most sensible and efficient method of heating.
- Different zones can be set so you can choose different temperatures in different rooms, creating a more efficient system.
- Compared to conventional radiator systems, UFH is silent. You won't hear any clanking pipes.
- An UFH system is unobtrusive allowing every square metre of space to be utilised by the homeowner and interior designer.



CAD Design and Customer Support

At Heatwave we promote underfloor heating for the following reasons:

- **Comfort** – A consistent temperature throughout the room, cooler at head height and warmer at foot level.
- **Control** – Programmable thermostatically controlled zones allow you to have the exact amount of heat, when and where you desire
- **Costs** – Due to reduced water temperatures, underfloor heating will reduce running costs, when compared to traditional heating methods.
- **Freedom of design** – Without the need for unsightly radiators, wallspace can be freed up offering greater flexibility in the design of your interior and positioning of furniture.

As a Heatwave customer you will get the following benefits:

- A bespoke design and integrated design
- The latest computer aided design (CAD) software for UFH to ensure optimal performance with your heat source
- Free advice on installation
- A CAD generated drawing to assist with the installation
- The highest quality products
- Free technical support

Our CAD Design Service

The CAD design service we offer uses the latest software to calculate flow temperatures to the manifold, ensuring comfortable temperature at all times. It specifies pipe spacing in the chosen room and the length of pipe required to guarantee heat distribution. The spacing of the pipe in the floor is critical and dependent on the design of the room i.e. number of windows, doors, the levels of insulation and the heat source. Heat Pumps output water at lower temperatures and are the most efficient form of heating when combined with underfloor heating.

Should you require fitting or on-site advice we can arrange for a Heatwave underfloor representative or installer to assist you.

For technical support please contact our help desk on:

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Floor Applications

There are a number of different methods of installing UFH, below are some of the options offered by Heatwave.

Solid / Screed Floor

Edge insulation is first fastened to the perimeter of the floor, allowing for any expansion which may occur. A layer of insulation is laid on top of the subfloor insulating the heat produced from the underfloor pipe from the underside. A layer of thin membrane is then laid over the insulation to protect it from the screed. The next step is to install the underfloor pipe according to the design specification, either using the floor clips or clip rail system that we offer. With a solid/screed floor the Heatwave underfloor pipe is permanently encapsulated by the screed. The underfloor pipe then heats the area of slab, radiating the heat evenly across the whole room.

Floating Floor on ground floor

LK Under Floor Heating using LK EPS is suitable for floating floors on solid floor constructions. The system consists of insulation boards of EPS class S200. This material has high insulating properties as well as being excellent for short or long-term loads. Slotted and turning boards are available in 30, 50 and 70 mm thicknesses.

Floating Floor on first floor

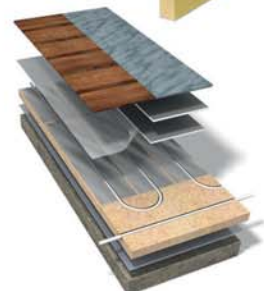
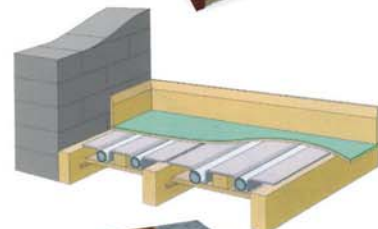
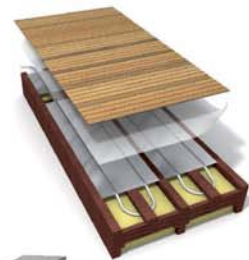
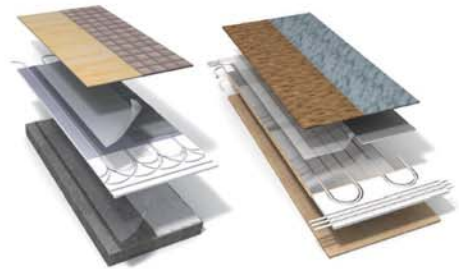
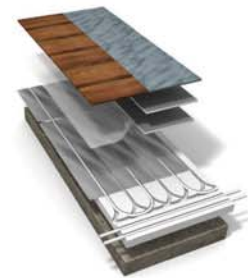
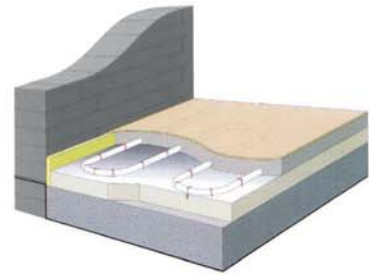
LK Under Floor Heating using LK Slotted Board EPS 16 is for laying on load-bearing floors only; giving exceptionally low construction height. The product is intended primarily for private living environments. The system is made up of slotted insulation boards, 16 mm thick, with an aluminium heat distribution plate, 0.5 mm thick, factory fixed. The heat distribution plate covers the entire surface of the insulation board. The slotted board, turning board and feeding board are made of high density EPS and provide extremely high resistance to short and long term compression.

Spreader Plates

LK Floor Heating incorporating LK Floor Joist Plate AL for installation on wooden joists c/c 400. The aluminium plate is available for both 16 mm floor heating pipes and 20 mm pipes. Also available is a specially designed plate for use in sprung sports-floors with a joist distance of c/c 411. For more information please contact us.

Intermediate floor with reflective foil

Reflective foil can be used on a floor where there are joists or cross battens. Similar to the solution above, it is well suited to secondary floors or existing floor surfaces. The battens or joists must first be notched to accommodate the underfloor pipe runs. The reflective foil is then laid on top and held in place by the suspended hooks. The underfloor pipe is then inserted into the clips, suspended between the reflective foil and floor surface.



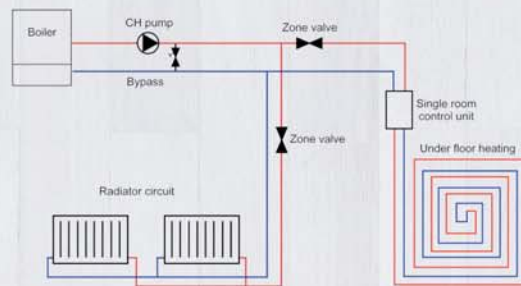
Single Loop Pump Set



The Heatwave Single Loop Pump Group is a compact & convenient solution to those wanting to install underfloor heating in an area up to a maximum of 30m² (at spacing of 300mm). The pump group is best suited to installations such as a single room extension, conservatory or bathroom, or where the heating demand is 3kW or less. With an in room thermostat, the pump group can be controlled independently of the main heating system, giving you complete control of the underfloor heating for your room.

Technical Data

Temperature range	30°C - 65°C
Temperature control	+/-2°C
Max Temperature	110°C
Maximum working pressure	14 bar static
Isolation valve connections	15mm compression



DSL

WLAN

Controls

With Eco Climate Control, Heatwave sets a new standard for a comfortable wireless control of surface heating and cooling systems.

Eco Climate Control provides technologically advanced products that are very accurate and easy to use. With the incorporated intelligent comfort and smartphone functions, Eco Climate Control allows the user to operate and regulate the temperature of rooms of any kind – locally or via remote access.

The system offers a modern solution for single houses, apartment buildings, hotels or public spaces, whereby optimal comfort, easy operation and energy-efficiency are of paramount importance.

Intelligent comfort for a better quality of life.



System Controls

WIRELESS

EcoClimate Temp Controller White Wireless



REF: ECOWSW
with Humidity Control - REF: ECOWSWH

EcoClimate Temp Controller Black Wireless



REF: ECOWSB
with Humidity Control - REF: ECOWSBH

EcoClimate Temp Control (no screen) Wireless - White



REF: ECOW1

EcoClimate Master Wireless UFH Controller



4C, 6A - REF: ECOMW46
8C, 12A - REF: ECOMW812
12C, 18A - REF: ECOMW128

EcoClimate Master LAN 230v Wireless (Smart Phone App Control)



4C, 6A - REF: ECOMWN46
8C, 12A - REF: ECOMWN812
12C, 18A - REF: ECOMWN128

WIRED

EcoClimate Wired Room Sensor



REF: ECOC230

EcoClimate Wired Room Sen, Display



REF: ECOD230

EcoClimate Master Wired System 10 Zones/Channels



REF: ECOM230

Intelligent, practical and integral functions

Eco Climate Control is a practical and intuitive total solution, which fulfills the needs of modern room automation in a fast and reliable manner.

The advantages of the system

Reliable 868-MHz-wireless technology: ideal for the use in renovation.

Bi-directional communication: therefore, only limited transmission power necessary.

Room operating and configuration device in one: easy configuration of additional functions with the standard room operating unit.

Optimal display of information: room operating unit with a wide range of easily readable information, as well as radio controller with LED indicators for every function.

Comfortable operation: with modern sensor buttons.

Access at any time: remote control via smartphone.

Ready for the future: expandable via software update with a Micro SD Card.



For our full range please visit heatwaveunderfloor.co.uk

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1" UFH Manifold Kit Includes End Set and Ball Valves



2 CIRCUIT - REF: HWR227
 3 CIRCUIT - REF: HWR228
 4 CIRCUIT - REF: HWR229
 5 CIRCUIT - REF: HWR230
 6 CIRCUIT - REF: HWR231
 7 CIRCUIT - REF: HWR232
 8 CIRCUIT - REF: HWR233
 9 CIRCUIT - REF: HWR234
 10 CIRCUIT - REF: HWR235
 11 CIRCUIT - REF: HWR236
 12 CIRCUIT - REF: HWR237

Thermomix "A" Rated Pack



REF: HWR258

Single Room Pack "A" Rated



REF: HWR259

UFH Thermoelctronic Head 230V



REF: HWR256

22mm Direct Heatguard UFH



REF: HWR225

Drain/Filing Valve Red+Blue Pair



REF: HWR222

Manifold Ball Valve & Gauge (Pair)



REF: HWR276

28mm Heatguard UFH Mixing Valve



REF: HWR224

Extension For UFH Manifold



REF: HWR238

Manifold Tee Piece 1/2"x1x1/2"



REF: HWR251

90 Degree UFH Conn Elbow Pack



REF: HWR261

1/2" UFH Air Vent - Nickel



REF: HWR220

Eurocone Fitting 16x2.0 - Multi



REF: HWR239

Eurocone Male Thread Fitting



FLOW - REF: HWR278
 RET - REF: HWR279

UFH Manifold Blanking Cap



REF: HWR254

For our full range please visit heatwaveunderfloor.co.uk



CONTACT

Contact a Heatwave representative by phone, email or in person. You can then either send a set of plans to us or we can arrange a site visit. We can then assess your property and put a proposal together for you based on your requirements and our recommendations.



QUOTE

We will aim to send your quote out to you as soon as possible detailing exactly what Heatwave will supply. We offer an installation service locally, or we can recommend a heating engineer in your area to complete the installation.



COMFORT

We won't be satisfied until you are. We are confident that you will be satisfied as soon as your final floor fixtures are laid and your underfloor heating system is switched on. With zone control you can specify the temperature in each room, ensuring you have constant levels of comfort throughout your house.



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