

FIRED EARTH

&

Warmup

The world's best-selling floor heating brand™

CHOOSING AND INSTALLING YOUR UNDERFLOOR WARMUP STICKYMAT SYSTEM



The Warmup dedicated Fired Earth customer service Help Line Number is

0208 838 8178

Alternatively you can also call out of hours on the Warmup standard service support number

24hrs /7 days a week /365 days a year basis for technical queries.

0845 345 2288

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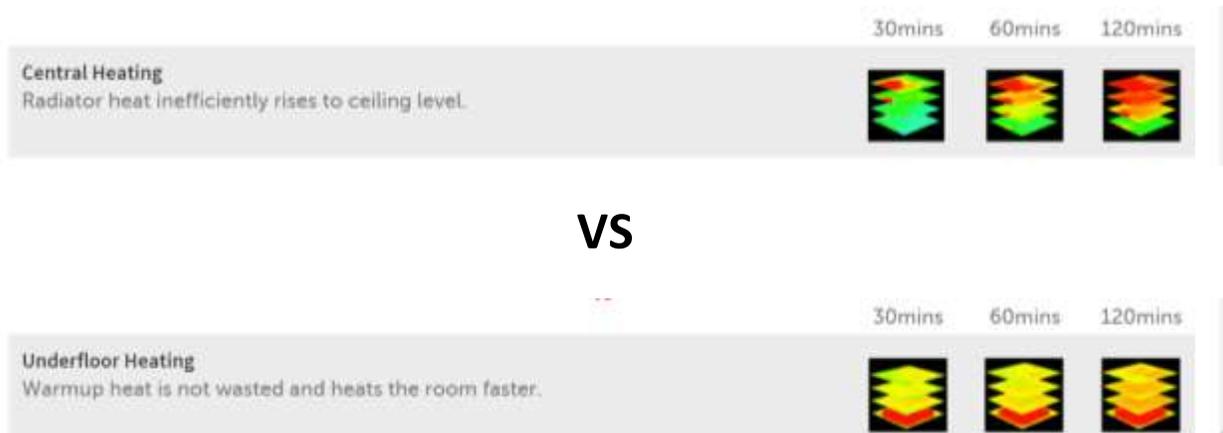
WHY CHOOSE UNDERFLOOR HEATING?

To decide which heating system to choose, it is critical to understand the differences between the two basic types of systems that are available such as low temperature underfloor heating or convected heat produced by radiators.

Benefits of using low temperature radiant underfloor heating

- Better suited to new low energy houses
- No heat convection required so less movement of dust and pollutions around the house – reducing the risk of allergies
- Underfloor heating system is silent
- Floor and wall space freed up – design of a new bathroom made easier
- Savings on utility bills by using a lower temperature than a radiator

Comparison between central heating and underfloor heating



Convection heating is usually emitted from a high temperature radiator placed in the room. It works with hot air rising up, cooling and falling creating an air cycle. Radiant heating on the other hand heats at a much lower temperature through wire elements in the floor to create a much more even distribution of heat.

WARMUP PRODUCTS AVAILABLE AT FIRED EARTH

Warmup Insulation Boards & Tape

Insulate and waterproof in one easy step with Warmup Insulation boards. The boards have a high insulating capability for energy efficiency and an added benefit of sound proofing. They can be used on walls or floors and are ideal for applications such as dry lining, insulating and waterproofing in areas such as wetrooms, bathrooms and kitchen.



Warmup Loose Wire System (DWS)



Warmup Loose Wire System is designed for use under ceramic or natural stone tiled flooring. It uses an ultra-thin dual-core heating wire that is flexible, easy to install and will not raise floor levels. Ideal for more irregular shaped areas for precise installation.

It is suitable for all applications, providing primary or secondary heating in all rooms or projects that adhere to Building Regulations.

Warmup 150 W/m² and 200 W/m² StickyMat System

The Warmup StickyMat underfloor heating system is suitable for all projects: new build, retrofits and refurbishments.

The system consists of a thin dual core loose wire evenly spaced and taped to a glassfibre mesh with pressure sensitive adhesive, which allows for the fastest and most secure installation method of electric underfloor heating.



The Warmup Sticky Mat & Loose Wire underfloor heating systems are suitable for all projects: new build, retrofits and refurbishments.

- Thin dual core loose wire or evenly taped to a glass fibre mesh with a StickyMat
- Thinnest dual-fluoropolymer coated heating wire (less than 1.8mm diameter)
- output of 150W/m² and 200W/m²
- single 3m long 'cold tail' connection lead
- European compliant and CE marked as well as BEAB approved.
- Covered by Safety Net & Lifetime warranty

Warmup 3iE® Energy-Monitor Thermostat

Designed by Warmup, the unique and exclusive 3iE Energy-Monitor Thermostat is the only programmable thermostat to come with Active Energy Management™ prompting users to save up to 10% on energy bills.

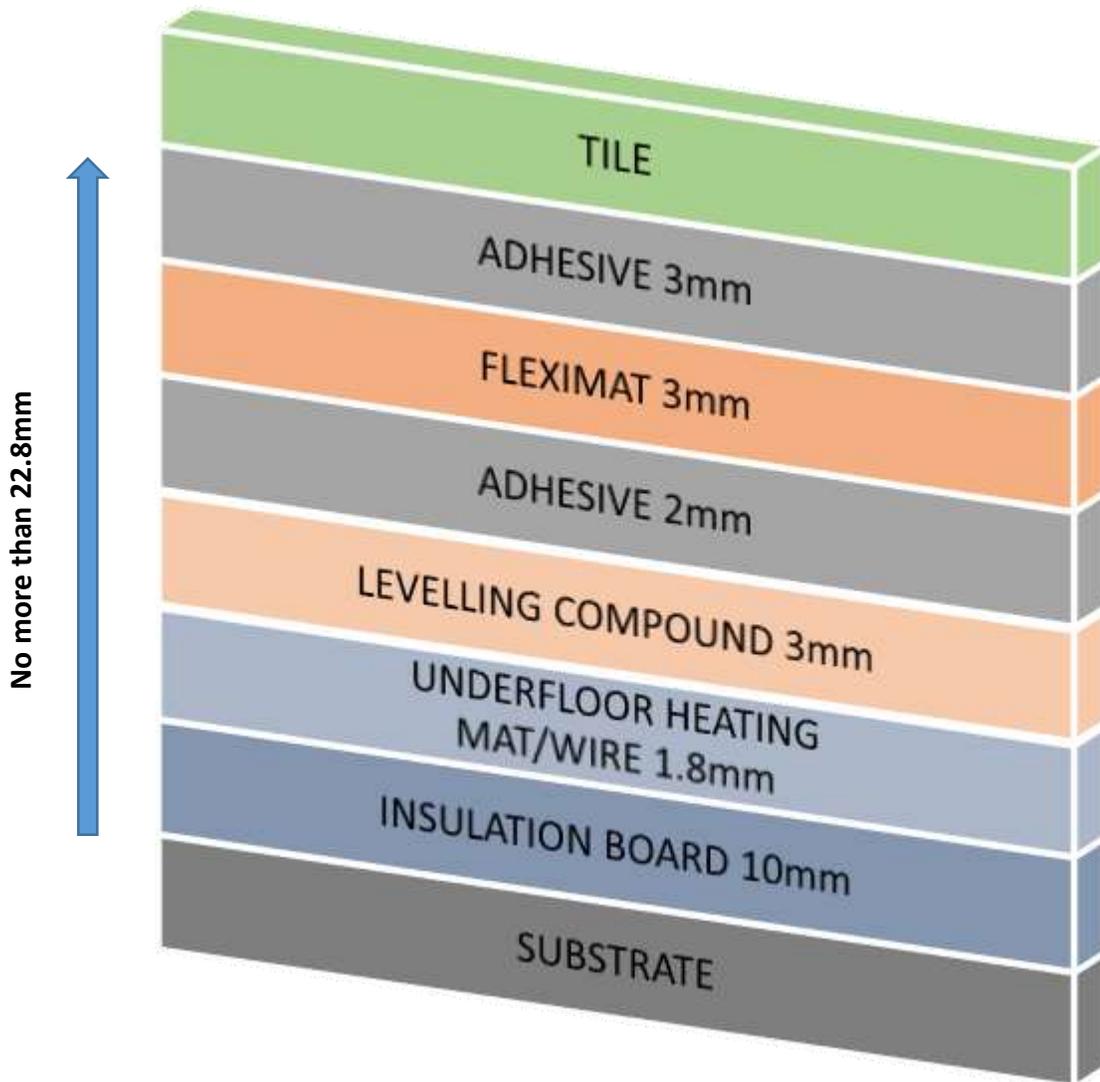


Warmup 4iE® Smart WiFi Thermostat

The 4iE Smart WiFi thermostat learns how you use your heating and the unique way your house reacts and automatically suggests ways for you to save energy, like what temperature you should set for when you're not home and times you can turn the heating off early. Using SmartGeo®, the 4iE works with your smart phone to automatically bring your home up to temperature whether you are at home or not. It learns how you use your heating to calculate the most efficient settings for your home saving up to 25% of your heating usage. Using EasySwitch®, it also finds the best energy tariffs available, saving you on average a further £210 per year according to the Department of Energy & Climate Change.

INSTALLATION

Installation Layers



The Maximum depth between the top of the substrate and the bottom of your tile will be approx. 22.8mm (2.3cm). Please remember that the 1.8mm underfloor heating wire will be imbedding within the 3mm of the levelling compound so the overall depth will be less than 22.8mm (2.3cm)

INSTALLATION CHECKLIST

ALWAYS ensure all mains electrical connections are undertaken by a certified electrician. All work must conform to current IEE Wiring Regulations.

ALWAYS carefully read the instruction manual before commencing installation.

ALWAYS ensure the system is tested before, during and after installation.

ALWAYS plan your mat or wire layout and installation so that any drilling after tiling (e.g. for sanitary ware) will not damage the wiring.

ALWAYS maintain a minimum gap of 50mm between wire runs and from conductive parts.

ALWAYS ensure the end cap and manufactured joint are under a full bed adhesive or levelling compound and covered with a tile.

ALWAYS ensure that the heaters are separated from other heat sources such as luminaires and chimneys.

ALWAYS ensure that the maximum thermal resistance of the floor does not exceed 0.15 [m²K / W].

NEVER cut or shorten the heating element at any time.

NEVER commence installation on a concrete floor that has not been fully cured.

NEVER leave surplus matting or wire rolled up under units or fixtures - **USE THE CORRECT SIZE MAT/WIRE.**

NEVER use staples to secure the heating element to the subfloor.

NEVER run the floor sensor wire or power lead over or under the heating element or close to other heat sources such as hot water pipes.

NEVER connect two mats in series, only connect mats in parallel.

NEVER switch on the installed mat or wire until 14 days after fitting to allow the tile adhesive to dry completely.

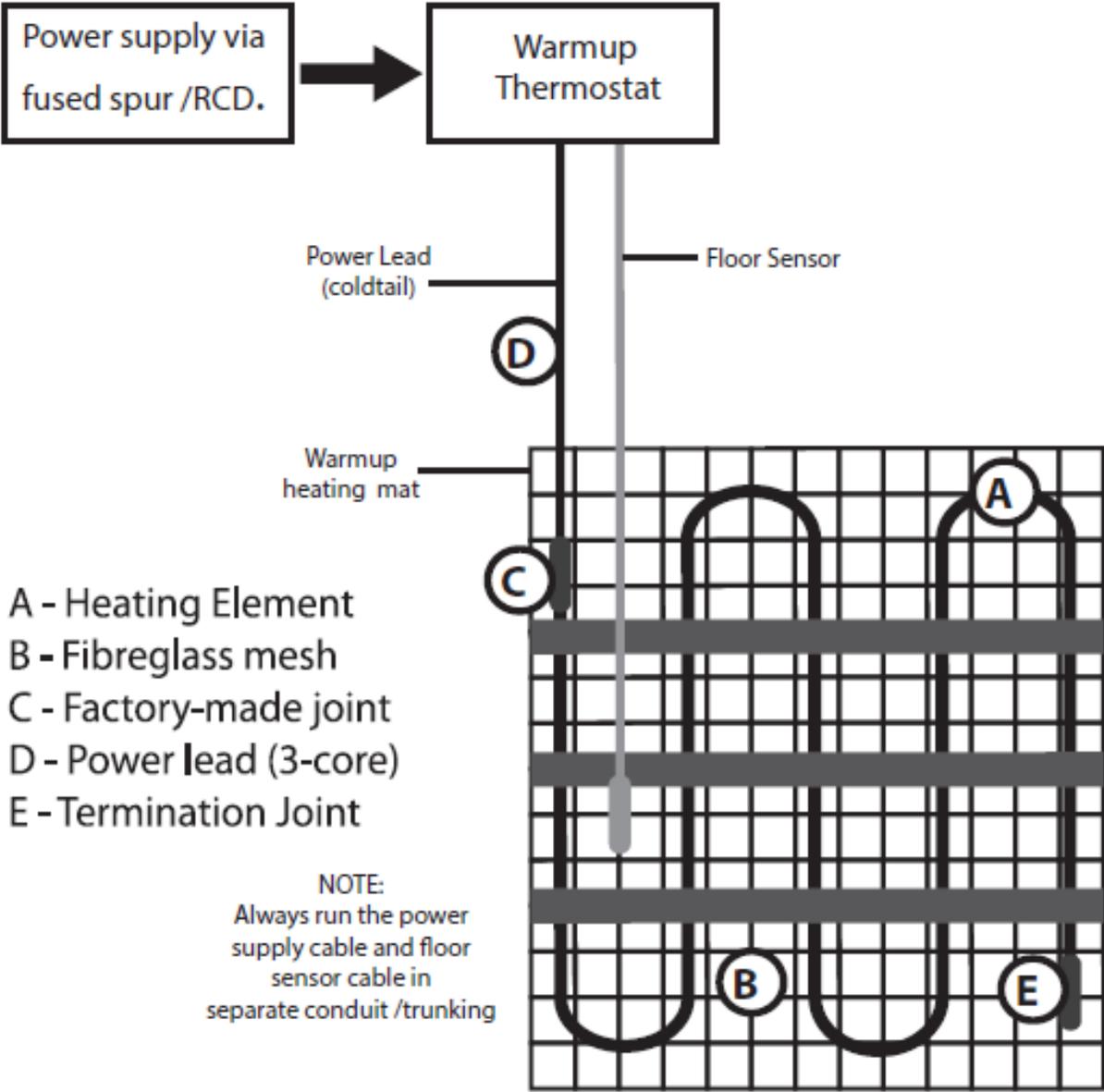
NEVER install the mat or wire in temperatures less than +5°C.

NEVER use the heating system to dry out levelling compound or adhesive.

NEVER tape over the end cap or manufactured joint.

NEVER attempt a DIY repair if you damage the heater.

WARMUP STICKYMAT ELECTRICAL CIRCUIT DIAGRAM



WARMUP STICKYMAT INSTALLATION GUIDE

* Full installation guidelines are also supplied with the product

Step 1 - Mark the subfloor

Ensure that the subfloor is of the same construction where you intend to lay the mat to ensure that the heater performs effectively. Warmup always recommend that insulation boards, such as Warmup® Insulation Boards (10mm recommended), are used to improve the efficiency of the mats. Using a permanent marker, mark out areas on the subfloor where units and fixtures will be fitted. DO NOT install the mat in any of these areas. Start by laying the mat in the location closest to the thermostat. Mark the positions and planned route of the power lead cables as well as the floor sensor.

ALL MANUFACTURED JOINTS NEED TO BE PLACED ON THE FLOOR UNDER A FULL BED OF ADHESIVE AND TILES.

If you have awkward areas in the room the heating wire can be removed from the mat to fit these areas. When doing this ensure that you DO NOT let the heating element cross or touch. Ensure any loose wires are no closer than 50mm from each other, the wall or from any other wires still attached to the mesh. Loose wire taken from the mat can be secured to the floor using duct tape.

Step 2 - Test the Heater

Before installing the heating mat perform a test to ensure that the heater has not been damaged during planning.

Step 3 - Cut, turn and affix the mat

When you have marked the positions and planned the route of the mat on the floor, start laying the mat cutting and turning where the marks have been made, beginning at the location closest to the thermostat. Be careful and never cut the heating cable. Affix the mat to the floor using its self-adhesive mesh, or using the double sided tape on the mat. Use duct tape to affix any loose wires which have been removed from the mat. Once the mat is fitted, ensure that there are no loose sections, paying close attention to the ends of the mats and any section which has been turned.

DO NOT TAPE OVER THE MANUFACTURED JOINTS OR FLOOR SENSOR TIP.

If you find that once the heater has been laid you have too much of the mat left over STOP, contact Warmup immediately on 0208 8388178. Remember you must NEVER cut the heating element to fit an area or leave surplus mats behind units or fixtures. If you are installing multiple mats in one room they should be connected in parallel.

Step 4 - After installation test

Perform the same test as in step 2.

Step 5 - Install floor sensor

Place the floor sensor below the fibreglass mesh. The floor sensor must be installed centrally between the two runs of heating element and should extend a minimum of 150mm into the heated area. Secure the sensor to the floor using tape.

NOTE: DO NOT TAPE OVER THE SENSOR TIP.

It is best to avoid placing the floor sensor in areas of heat fluctuations e.g. near hot water pipes or radiators. It may be necessary to cut a channel in the floor to ensure that the floor sensor and power supply cable are kept at the same height as the heating element. When installing the floor sensor (located in the thermostat box) DO NOT cross over or under the heating element. At this stage the floor sensor must also be tested. Check the resistance of the floor sensor using your multi-meter (20K ohms). You should get a reading of approximately 9-23K ohms depending on the room temperature. If you do not get a reading your floor sensor may be damaged.

NOTE: The sensor may be extended up to 50m.

Step 6 - Fit Power Leads

Each mat is fitted with a single power lead for connecting the mat to the thermostat. To ensure the power lead remains at the same level as the heating element, you may need to cut or chisel a channel in the subfloor. When doing this take care not to damage the heating element. Secure the power lead in place using tape but do not tape over manufactured joint where the power supply cable meets the heating element. The power lead will go into the electrical trunking/conduit up to the thermostat. It is possible to extend the power lead using twin and earth cable.

NOTE: Instructions for fitting the Warmup® thermostat are included in the thermostat box.

Step 7 – Prepare for the tiler

Once the underfloor heating mat/wire and thermostat have been installed you will need to start the preparation for the tiler. Cover the mat/wire in a thin layer of Universal levelling compound (appx 2/3mm). This will both protect the mat during the installation of the tiles and provide a smooth and level surface on which to work. Once the levelling compound is dry, Fired Earth Fleximat (de-coupling membrane) will need to be installed. This will isolate the tiles from expansion and contraction within the substrate.

Step 8 - Tile & grout the floor

Ensure you use tile adhesives and grouts suitable for use with underfloor heating systems (they must contain a flexible additive). It is important that each tile is solidly bedded in adhesive, with no air gaps or voids beneath. Do NOT dot and dab the tiles. Check with the Manufacturers of the adhesive to ensure suitability.

FINALLY TEST THE RESISTANCE OF THE HEATER(S) ONCE TILING IS COMPLETE

Commission the heater – allow 14 days for the adhesive and grout to fully cure before turning on the heating

WARRANTY

Terms & Conditions

All Warmup thermostats, controllers and wiring centres are warrantied for a period of 3 years.

All Warmup insulation panels are warrantied for a period of 5 years.

SAFETY Net Installation-Guarantee

Warmup electric heating Matt or loose wire systems are covered by our exclusive Safety-Net® Installation Guarantee: If you make a mistake and damage the Warmup heating matt or loose wire before laying the floor covering, return the damaged product, to Warmup within 30 DAYS along with your original dated sales receipt. WARMUP WILL REPLACE IT FREE OF CHARGE!

WARMUP Lifetime Limited Warranty

Warmup Loose Wire system (DWS) – Lifetime Warranty • Warmup Matting system (PFM) – are covered under the Lifetime Warranty

CUSTOMER SERVICE SUPPORT

The Warmup dedicated Fired Earth customer service Help Line Number is

0208 838 8178

I am pleased to announce the above number will be a dedicated phone number for ALL Fired earth stores, customers and traders. Please use this when contacting Warmup customer support. This is available from 8am to 5.30pm.

If the above dedicated number is engaged and your call is urgent or out of hours, you can also call on the Warmup standard support number which is

0845 345 2288

This number is available on a 24hrs /7 days a week /365 days a year basis for technical queries.

ADDITIONAL RECOMMENDED FIRED EARTH PRODUCTS

Fleximat



Fired Earth Fleximat should be installed onto the dry universal levelling compound. This will prevent any expansion or contraction of the substrate from affecting the tiles

Universal Levelling Compound & Adhesive



Norcros Universal Levelling Compound is a single part polymer modified self-smoothing floor levelling compound. It is suitable for levelling a variety of substrates including concrete. Cement: sand screed, flooring grade asphalt, terrazzo and existing quarry and vinyl tiles. It is ideal for use with underfloor heating mats where it may be used to cover the weird elements, providing a level substrate to tile to and also protecting the heating elements during the fixing process.

Norcros Wall & Floor Tile Adhesive is a cement-based thin bed adhesive designed for fixing ceramic, porcelain and natural stone* tiles to a variety of building surfaces. It is water and weather resistant. The product has a long pot life for ease of use and minimal wastage.

