



Warmup

The best underfloor heating - guaranteed™



Our exclusive **3iE™ energy-monitor thermostat** saves you up to 10% on energy bills and is now available in a **new extended colour range** and with **Extended Warranty option**



Silver Grey



Classic Cream



Leaf Green



Madison Blue



Deep Pink



Warm Berry

The Warmup 3iE™ energy-monitor thermostat - available now in even more colours to suit your style



Silver Grey



Leaf Green



Madison Blue



Deep Pink



Warm Berry



For Warmup's full 3iE range and new Extended Warranty option see page 22

The 3iE™ energy-monitor thermostat is **exclusive to Warmup**

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Can I have Underfloor Heating?

At Warmup one of the most common questions asked by customers is whether a certain type of floor is suitable for Underfloor Heating.

The answer is that there is a product to suit almost any type of floor. Use the table below to find out which product will best suit your floor type, and contact us on 0845 345 2288 with any other questions.

WARMUP PRODUCTS	Loose Wire	150 Mat	200 Mat	Inscreed Cable	Foil Heater
Page number	14	16	16	18	20
FLOORING TYPE					
Tile & Stone	✓	✓	✓	✓	
Hardwood				✓	✓
Carpet				✓	✓
Laminate				✓	✓
Vinyl				✓	✓

All Warmup Underfloor Heating Systems are compliant with the new 18th Edition IEE Regulations.

The benefits of Warmup underfloor heating

1. No more inconvenient and inefficient radiators

With underfloor heating, you can use every square metre of your home the way you want to use it. A plumber can easily remove your radiators.

Look through any magazine and you will notice that pictures of quality bathrooms, kitchens and lounges never show radiators.

We believe that radiators are inefficient, expensive to maintain and take up valuable wall space; interior designers know this and avoid them whenever possible.



Radiators result in a stuffy, uncomfortable atmosphere and promote heat loss through windows, walls, ceilings and roofs. The result is wasted energy, and wasted money.

Additionally, choosing to power the system using electricity generated by renewable sources will radically cut your CO2 emissions.

2. Warmup's Lifetime Warranty and zero maintenance costs mean ultra-low lifetime costs

Warmup underfloor heating systems are guaranteed for the lifetime of your floor. With no radiators to bleed or boilers to service, electric underfloor heating has no maintenance costs and will never let you down. Ever.

3. Quick heat-up times in only the rooms needed with precise zone control

A Warmup system installed on insulation boards (above the screed) reaches operating temperature in 20 minutes allowing you to heat only the rooms you need when you need them. This is much faster than the usual 4 hours required by water-based floor heating systems. See page 5 for more details on the advantages of zone heating with Warmup's world-leading, exclusive thermostat.

4. Easier cleaning and enhanced hygiene

Underfloor heating dries wet floors more quickly, making cleaning faster. Floor heating reduces your home's moisture content and eliminates the moisture dust mites need to survive.

Also eliminated is the "chimney effect" of radiators which act as

dust traps and then create drafts that move dust and other irritants around the room and causes wall paper to discolour and peel. This is a huge benefit to sufferers of asthma and other breathing difficulties.

"The kids love it. They actually take their slippers off before they walk over it so they can feel the warmth and the cat thinks he has won the lottery lying on the heated floor! Next year we will do the bathrooms too!"

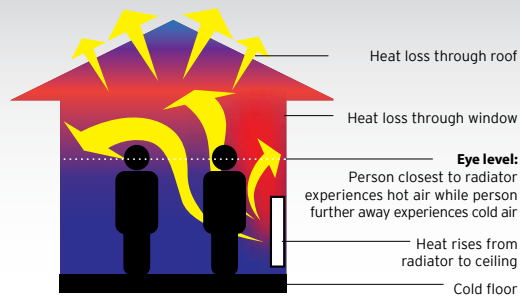
- G Wood, Worcestershire

5. Ultimate comfort through even heat distribution

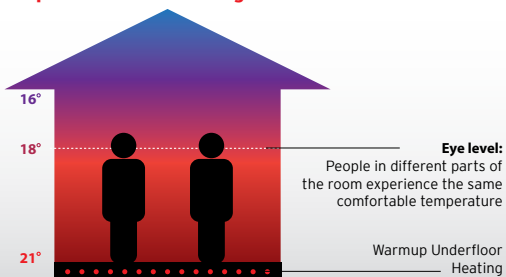
Underfloor heating spreads warmth over the entire floor area, resulting in up to half the heat being emitted as low-temperature radiant heat. Warming a large area at a low temperature (21-25° C / 70-77° F) produces the most comfortable and efficient form of heating possible by reducing the heat loss from our bodies without overheating the surrounding air.

Ultimate comfort through even heat distribution

Typical Central Heating



Warmup Radiant Floor Heating



For the latest thermal images generated using test data from the Warmup Test Laboratory, turn to page 7

The cost of running a Warmup Heating System

Many people assume that running a whole-house electrical heating system will be costlier than their gas boiler system, simply because gas is currently cheaper than electricity. This, however, is just not the case...

Soaring fuel prices make electric heating cheaper than gas

According to independent energy watchdog Energywatch, since 2003, gas prices have risen by as much as 92%, while electricity prices have only increased by just 54% in the same period.

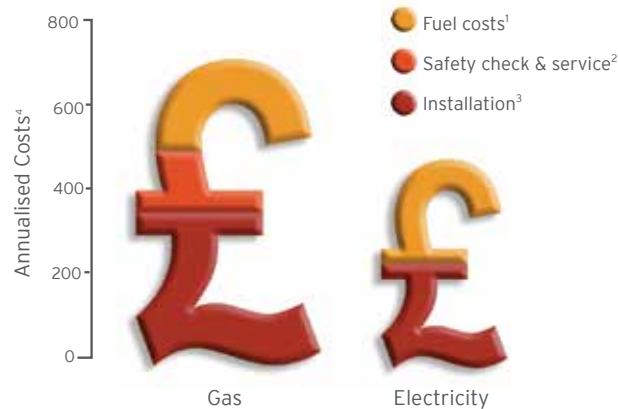
As electricity is almost 100% efficient at the point of use, whereas gas boilers waste energy by way of the flue and transport throughout the walls, gas users will soon be paying much more and receiving much less.

Fuel Costs versus Ownership Costs

The typical lifespan of a gas boiler system is 10 years, according to industry estimates.

Our underfloor heaters have no moving parts to wear-out and come with a LIFETIME Warranty*. When maintenance costs are added to the equation, the annual running costs of a radiant floor system look remarkably attractive.

A WARMUP system for a typical UK bathroom uses less power per hour than two 100-watt light bulbs

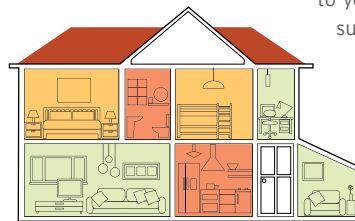


***Sources and Assumptions:** 1. Fuel costs (heating and hot water) based on BRE GPG34 - updated with 2007 figures from Ofgen. 2. British Gas contracted service prices and maintenance costs from National Landlords Association 3. Cost of 6 radiators with Gas Boiler versus Cost of installing Warmup Underfloor Heating for 65m² 4. Lifetimes used are industry averages - 10 years for gas boiler / 15 years for under-floor heating. **Note: Warmup systems are tested for 60 years using accelerated testing procedures**

Better Control of Fuel Costs - Zoning Your House

Adding a zone to a house that uses electric heating is as simple as adding a thermostat. Unlike gas central heating systems that run all the rooms of your house at once, whether you are using them or not, electric systems can be set to heat individual rooms where and when you need it (a bathroom for an hour and a half in the morning for example). By tailoring your system usage according

to your lifestyle, you can enjoy substantial savings with increased comfort.



Morning



Evening

- Unheated room
15°C
- Heated room
21°C
- Heated room
18°C

Costs just
0.7p/m²/hr
to run! **

Annual cost of using a Warmup Underfloor Heating System as sole-source heating in different rooms in your home:

ROOM TYPE	HEATED AREA	RUNNING TIME		ANNUAL TYPICAL COST*
		AM	PM	
BATHROOM	4m ²	2hrs	1hr	£17.82
KITCHEN	5m ²	1hr	2hrs	£22.28

*Assumptions: 9.3p/kWh - system on 6 months (183 days) per year. System installed on 10mm Warmup Insulation Board. **Avg. running cost after initial heat-up period = 0.74p/m²/hr. For more details on running costs, see page 32.

Notice: Any unauthorised replication of this material, including running cost data, will constitute an infringement of copyright. - © Warmup Plc 2009 All rights reserved.

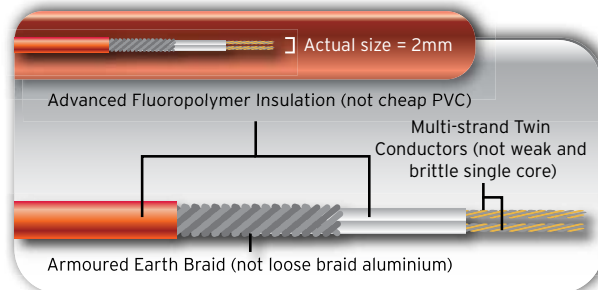
Warmup R & D: Unparalleled innovation, backed by over 1.5 million installations in more than 57 countries

Warmup Innovation Programme - Products

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

The 2mm thin BEAB-approved Warmup Undertile Heating element is the thinnest and toughest in the industry. Our exclusive wire is comprised of a twin-core, multi-strand heating wire, protected by a tough earth braid, integrated into 2 layers of advanced fluoropolymer insulation (ETFE). It is simply the best wire money can buy.

Our new foil heater for under laminate, combines the flexibility of a wire system with the thinness of a ribbon (see page 20), and is exclusive to Warmup. Our new range of low-power, rapid-warming electric towel rails (see page 26) are covered by a 5-year warranty, and offer fantastic value.



Warmup Innovation Programme - Safety

With the help of independent testing bodies like ASTA BEAB, KEMA, VDE and UL to name but a few, we can be confident that our products will provide you with safe and efficient heating for a lifetime of warmth.

Warmup is the **only** underfloor heating company whose products are European Compliant, CE marked and accredited by **all** these independent institutions:



Warmup Innovation Programme - Test Laboratory Results

To answer your questions on heat-up times, running costs and best operating procedures, Warmup has just completed a series of extensive tests using EN442-2 standards. This information allows us to tell you exactly how our products will perform in a given situation, letting you choose the product and installation method that is right for you.

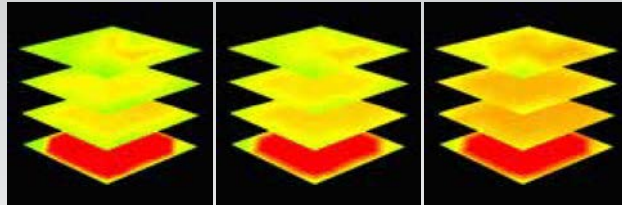
Warmup is the only manufacturer with this information, and the only company that can answer your questions with 100% accuracy.

Warmup Test Laboratory - Thermal Stratification Images

30 minutes

60 minutes

120 minutes

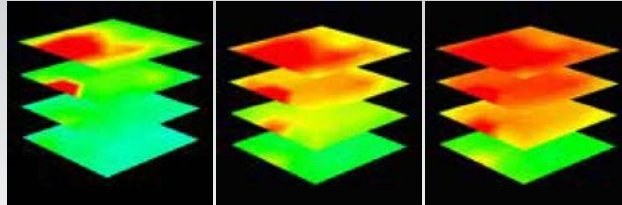


Warmup Underfloor Heating

30 minutes

60 minutes

120 minutes



Standard Radiator

Data from the hundreds of air and floor sensors in the Warmup Test Laboratory illustrate exactly why standard radiator systems are so inefficient when compared to floor heating.

The heat signature from radiators is the exact opposite of the "ideal heat signature", where feet and extremities are warm and the air is cooler at head height. Radiators must over-heat the air at the top of the room in order to reach the minimum acceptable comfort reading at floor level. This over-heating wastes fuel and is the cause of radiators' poor efficiency.

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

- 1. Affordable warmth and luxury.** For as little as £265, you can install a Warmup system, bringing warmth to your floor and your house - for life. It's incredible value!
- 2. We have the best range available.** Whatever your floor surface (wood, laminate, tile or stone) or subfloor, Warmup has a heater for you. We also supply a full range of towel heaters, mirror demisters and insulation board.
- 3. Customer is King.** This is our mantra, both in the UK and around the world. Nobody will provide you with better service, before, during or after installation.
- 4. Our R & D department has all the answers.** They know everything there is to know about the operating characteristics of all our systems in your home, and are there to support you.
- 5. Thin, tough wire that lasts.** Our wire is the easiest to install and the toughest and thinnest in the industry.
- 6. Our LIFETIME GUARANTEE is the best because:**
 - Our wire is the absolute best in the industry (see pg.6)
 - Our installation systems are simple and have been tested over 20 years
 - We are a strongly-financed public company
- 7. SafetyNet™ Installation Guarantee.** Call us before you tile, and we will replace your heater **free of charge** if the installation process goes wrong. **Only Warmup offers this guarantee.**
- 8. Best thermostat available.** Our unique 3iE thermostat is easy to programme and built on software



that adjusts to all floor surfaces.
The thermostat is the most advanced
of its kind and exclusive to us.

- 9. Best trained team to answer all your enquiries.** Whether you need a same-day quote or have a question, you'll have an immediate answer.

- 10. Full online and telephone support.** Our website, www.warmup.co.uk, has full technical and video back up and support, including live online chat.

You can also call 0845 345 2288 (at local rates)
24 hour a day, 7 days a week, 365 day of the year.

"With this type
of product
after-sales care
and technical
support is
important and
in this case, it
was faultless."

C. Brennan,
Hampshire

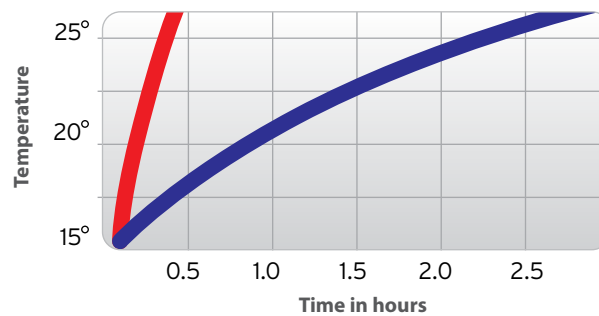
- 11. More electrical approvals than our competition.** To guarantee the highest safety standards, our products carry internationally recognised safety marks including ASTA BEAB, SEMKO, VDE, UL, GS, KEMA, CSA and more. They are European Compliant and CE marked.
- 12. Over 1.5 million installations in more than 57 countries.** We can support our retailers with global knowledge, unsurpassed experience from a tried and trusted team.



Warmup Insulation Boards

Using Warmup insulation boards with under-floor heating can lower your running costs by as much as 50% while reducing your carbon footprint. In fact, they can pay for themselves in as little as 2 and a half years*.

Savings are obtained by reducing heat-up times by 60% or more, giving you a more cost-effective and faster-reacting system.



- With insulation board
- Without insulation board

In testing, heat-up time was cut from over 2 and a half hours to just 20 minutes.

This data applies to Warmup heating products only.

LOOKING FOR HEAT UP TIMES?
See chart on page 31

* Assumes a system running twice a day for 2 hours on a concrete subfloor

** Source: Warmup tests performed to EN442-2 standards.



Price Guide

Area Covered	No. of Boards Required	Price (incl 20% VAT)			
		6mm	10mm	20mm	50mm
1m ²	2	£41.00	£41.00	£56.00	£99.98
2m ²	3	£61.50	£61.50	£84.00	£149.97
3m ²	5	£102.50	£102.50	£140.00	£249.95
4m ²	6	£123.00	£123.00	£168.00	£299.94
5m ²	7	£143.50	£143.50	£196.00	£349.93
6m ²	9	£184.50	£184.50	£252.00	£449.91
7m ²	10	£205.00	£205.00	£280.00	£499.90
8m ²	11	£225.50	£225.50	£308.00	£549.89
9m ²	13	£266.50	£266.50	£364.00	£649.87
10m ²	14	£287.00	£287.00	£392.00	£699.86
11m ²	15	£307.50	£307.50	£420.00	£749.85
12m ²	17	£348.50	£348.50	£476.00	£849.83
13m ²	18	£369.00	£369.00	£504.00	£899.82
14m ²	20	£410.00	£410.00	£560.00	£999.80
15m ²	21	£430.50	£430.50	£588.00	£1,049.79
16m ²	22	£451.00	£451.00	£616.00	£1,099.78
17m ²	24	£492.00	£492.00	£672.00	£1,199.76
18m ²	25	£512.50	£512.50	£700.00	£1,249.75
19m ²	26	£533.00	£533.00	£728.00	£1,299.74
20m ²	28	£574.00	£574.00	£784.00	£1,399.72

#Standard board thickness = 10mm

Accessories

Glass Fibre Tape - prevents movement and to cover the joints between boards.
One roll per 25 boards.

**Price
(incl 20% VAT)**

£3.99



Technical Data

- Board Dimensions: 1250mm x 600mm
- Board Thicknesses: 6mm, 10mm (standard), 20mm, 50mm
- Able to withstand a load of 30 tonnes per square metre
- U Values (W/m K): 6mm-4.50, 10mm-2.70, 20mm-1.35, 50mm-0.54
- Water Absorption (Capillary): Nil
- Class "O" / "B1" fire rated
- High soundproofing properties
- No primer required when used in conjunction with under floor heating

Warmup Insulated Underlay



The Warmup Insulated Underlay is a thin polystyrene insulation barrier with effective acoustic properties to reduce contact noise. It sits between the cold subfloor and Warmup's Foil Heater (See page 20), reflecting heat upward, making the heating system more efficient. The foil backing acts as a moisture barrier. The Underlay is designed to work with Warmup's Dual Overlay.



Features

- Resists heat loss and increases heating system's efficiency
- Extremely effective in reducing contact noise
- Very thin at only 6mm in depth
- Lightweight and easy to install
- Foil backing acts as a moisture barrier
- Recommended use with the Warmup Dual Overlay System for vinyl and carpet



Technical Data

- Roll Size: 1200mm(W); 2.5sqm, 5sqm, 10sqm and 25sqm (L)
- Thickness: 6mm
- Composition: Top Layer: Grooved polystyrene
Bottom Layer: Silver foil with adhesive overlap
- Rm Value: 0.19
- Contact Sound Reduction*: 25dB ΔLw when used in conjunction with the Warmup Dual Overlay System.



Price Guide

Coverage Area	Insulated Underlay System Code	Price (incl 20%VAT)
2.5sqm	WIU2.5	£29.98
5.0sqm	WIU5.0	£56.99
10.0sqm	WIU10.0	£109.99
25.0sqm	WIU25.0	£259.99

*In the case of floating substrate systems the sound reduction of the finished floor covering will always depend on the impact sound reduction of the existing substrate.

Warmup Dual Overlay

The **Warmup Dual Overlay** is a free-floating subfloor, offering a smooth and seamless finish for carpet, vinyl and linoleum. The two layers protect the heater



wire from sharp or heavy point loads and provides an even heat distribution. Installation is dry, clean and quick. Both the Insulated Underlay and Dual Overlay are designed to work together with Warmup Foil Heaters (see page 20).

Note: Cannot be used in wet areas such as bathrooms.



Features

- Consists of a base board (3mmD) and top boards (4mmD) with a contact adhesive to bond them together
- Provides a stable subfloor on which a variety of floor coverings can be laid
- Protects electric heating wire from damage if flooring is not laid immediately
- Very thin at only 7mm in depth
- Installation is quick, easy and dry - no need for self levelling
- Provides even heat distribution



Technical Data

- Contents: 4 base and 4 top boards (covers 2.88m²)
- Size: 1200mm(W) x 600mm (L)
- Thickness: base board - 3mm; top board - 4mm
- Composition: MDF fitted with an interactive adhesive
- Density (kg/m³): 770
- Bending Strength kg/cm²: >40
- Humidity (%): 4-10
- Thermal Rm value (m².K.W.⁻¹): 0.047
- Fire Class, DIN4102: B2



Price Guide

	Price (incl 20%VAT)
WDO - Dual Overlay System (covers 2.88m ²)	£82.99/pk

Warmup Loose Wire System

Warmup loose wire heaters are flexible and ideal for quick and easy installation in irregular shaped areas.



Features

- Ultra-thin dual-core heating element won't raise floor levels
- Thinnest wire you can buy: 2mm, multi-strand core, double-insulated using advanced fluoropolymers
- BEAB approved heating element meets the highest safety standards
- Quick installation - Single connection lead for fewer steps

**BEWARE
CHEAP IMITATIONS**
Low-quality thin PVC
insulated wires have a
much-reduced lifespan

Technical Data

- Operating voltage 230V: 50Hz
- Cable thickness: 2mm
- Average output rating: 150 W/m²
- Inner/Outer Insulation: Advanced Fluoropolymer
- Single 3m long 'cold tail' connection lead
- Approvals: BEAB Component, KEMA and GS
- European Compliant and CE marked
- Lifetime Warranty & SafetyNet™ Installation Guarantee

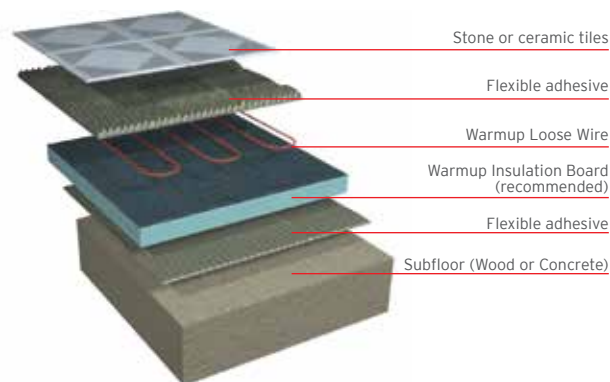


Price Guide

Area to be heated (m ²)	Heaters	Wattage	Amps	Price* (incl 20% VAT)
1.5 to 2.4m ²	DWS300	300W	1.30A	£121.99
2.5 to 3.4m ²	DWS400	400W	1.74A	£144.99
3.5 to 4.4m ²	DWS600	600W	2.61A	£212.99
4.5 to 5.9m ²	DWS800	800W	3.48A	£274.99
6.0 to 6.9m ²	DWS600 plus DWS400	1000W	4.35A	£357.98
7.0 to 8.4m ²	2 x DWS600	1200W	5.22A	£425.98
8.5 to 9.9m ²	DWS800 plus DWS600	1400W	6.09A	£487.98
10 to 11.4m ²	2 x DWS800	1600W	6.96A	£549.98
11.5 to 12.9m ²	DWS800 plus DWS600 plus DWS400	1800W	7.83A	£632.97
13.0 to 14.4m ²	2 x DWS800 plus DWS400	2000W	8.70A	£694.98
14.5 to 15.9m ²	2 x DWS800 plus DWS600	2200W	9.57A	£762.97
16.0 to 17.4m ²	3 x DWS800	2400W	10.43A	£824.98
17.5 to 18.9m ²	2 x DWS800 plus DWS600 plus DWS400	2600W	11.30A	£907.97
19.0 to 20.4m ²	3 x DWS800 plus DWS400	2800W	12.17A	£969.98
20.5 to 21.9m ²	3 x DWS800 plus DWS600	3000W	13.04A	£1,037.96
22.0 to 25m ²	4 x DWS800	3200W	13.91A	£1,099.96

*Prices above **DO NOT** include a Warmup 3iE thermostat (from £144.99 inc 20% VAT). See page 22-23 for details.

Application



Warmup 150W & 200W/m² Underfloor Heating Mats

Warmup mat systems are perfect for heating up a large or regular-shaped room.



Features

- Thinnest wire you can buy: 2mm, multi-strand core, double-insulated using advanced fluoropolymers
- Sturdy fibreglass mesh for extra durability and super-sticky double-sided tape for secure installation
- Quick installation - Simply roll out mat with pre-spaced wire



Technical Data

- Operating voltage 230V: 50Hz
- Width: 500mm (0.5 metre)
- Mat thickness: 3mm
- Inner/Outer Insulation: Advanced Fluoropolymer
- Output rating: 150 W/m² and 200 W/m²
- Single 3m long 'cold tail' connection lead
- Approvals: BEAB, CE, KEMA & GS
- European Compliant and CE marked
- Lifetime Warranty & SafetyNet™ Installation Guarantee

**BEWARE
CHEAP IMITATIONS**
Low-quality thin PVC insulated wires have a much-reduced lifespan





Price Guide: 150W/m² mats

Area to be heated (m ²)	Heaters	Wattage	Amps (inc 20% VAT)	Price*
1	PFM1.0 Mat	150W	0.65A	£93.99
1.5	PFM1.5 Mat	225W	0.98A	£118.99
2	PFM02 Mat	300W	1.30A	£134.99
3	PFM03 Mat	450W	1.96A	£191.99
4	PFM04 Mat	600W	2.61A	£238.99
5	PFM05 Mat	750W	3.26A	£290.99
6	PFM06 Mat	900W	3.91A	£342.99
7	PFM07 Mat	1050W	4.57A	£394.99
8	PFM08 Mat	1200W	5.22A	£430.99
9	PFM09 Mat	1350W	5.87A	£467.99
10	PFM10 Mat	1500W	6.52A	£503.99
11	PFM11 Mat	1650W	7.17A	£534.99
15	PFM15 Mat	2250W	9.78A	£732.99



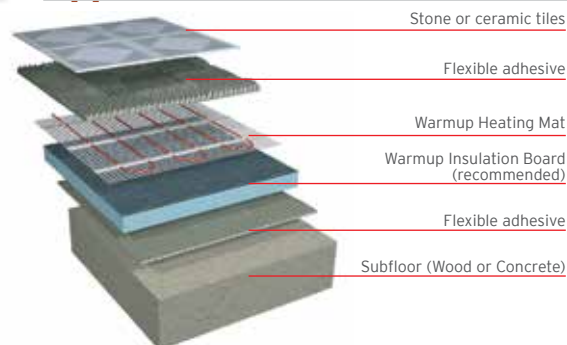
Price Guide: 200W/m² mats

Area to be heated (m ²)	Heaters	Wattage	Amps	Price* (inc 20% VAT)
0.5	2WPFM0.5 Mat	100W	0.44A	£61.99
1	2WPFM1 Mat	200W	0.87A	£103.99
1.5	2WPFM1.5 Mat	300W	1.30A	£129.99
2	2WPFM2 Mat	400W	1.74A	£144.99
3	2WPFM3 Mat	600W	2.61A	£207.99
4	2WPFM4 Mat	800W	3.48A	£259.99
5	2WPFM5 Mat	1000W	4.35A	£311.99
6	2WPFM6 Mat	1200W	5.22A	£368.99
7	2WPFM7 Mat	1400W	6.09A	£425.99
8	2WPFM8 Mat	1600W	6.96A	£467.99
9	2WPFM9 Mat	1800W	7.83A	£503.99
10	2WPFM10 Mat	2000W	8.70A	£539.99

*Prices above **DO NOT** include a Warmup 3iE thermostat (from £144.99 inc 20% VAT). See page 22-23 for details.



Application



Warmup Inscreed Cable System

Warmup Inscreed Heaters are excellent for simple installation within screeded floors of any size. Once installed, the heated screed can be covered with any flooring.



Features

- Tough - 6mm thick heating cable is protected by multiple layers of metal shielding and insulation
- Floor covering can be changed without risk of damage to the heater.
- Heating element meets the highest safety standards
- Grounding braid makes it safe for wet rooms
- Versatile - Compatible with all floor finishes
- Suitable for new build



Technical Data

- Operating voltage 230V: 50Hz
- Output rating: 100 to 210W/m²
- Single 2.5m long 'cold tail' connection lead
- European Compliant and CE marked
- 10-Year Warranty & SafetyNet™ Installation Guarantee



Price Guide

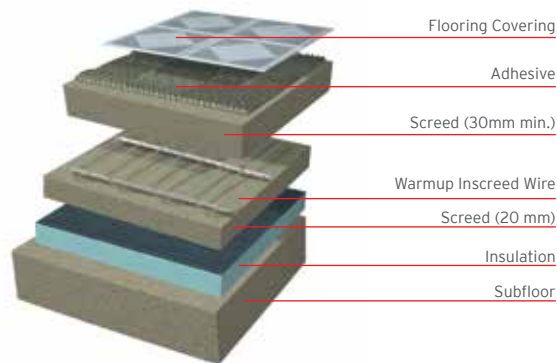
Coverage at 100W/m ²	Coverage at 150W/m ²	Coverage at 210W/m ²	Heaters	Heater Length	Wattage	Amps	Price* (incl 20% VAT)
1.8m ²	1.2m ²	0.9m ²	WIS180	9.0	180W	0.8A	£51.99
2.8m ²	1.9m ²	1.4m ²	WIS280	14.0	280W	1.2A	£72.99
3.9m ²	2.6m ²	2.0m ²	WIS390	19.5	390W	1.7A	£82.99
5.0m ²	3.3m ²	2.5m ²	WIS500	25.0	500W	2.2A	£98.99
6.5m ²	4.3m ²	3.3m ²	WIS650	32.5	650W	2.8A	£118.99
7.6m ²	5.1m ²	3.8m ²	WIS760	38.0	760W	3.3A	£124.99
10.0m ²	6.7m ²	5.0m ²	WIS1000	50.0	1000W	4.3A	£150.99
12.0m ²	8.0m ²	6.0m ²	WIS1200	60.0	1200W	5.2A	£176.99
14.6m ²	9.7m ²	7.3m ²	WIS1460	73.0	1460W	6.3A	£207.99
15.5m ²	10.3m ²	7.8m ²	WIS1550	77.5	1550W	6.7A	£212.99
17.7m ²	11.8m ²	8.9m ²	WIS1770	88.5	1770W	7.7A	£228.99
20.7m ²	13.8m ²	10.4m ²	WIS2070	103.5	2070W	9.0A	£248.99
26.0m ²	17.3m ²	13.0m ²	WIS2600	130.0	2600W	11.3A	£300.99
31.4m ²	20.9m ²	15.7m ²	WIS3140	157.0	3140W	13.7A	£347.99
33.7m ²	22.5m ²	16.9m ²	WIS3370	168.5	3370W	14.7A	£368.99

*Prices above DO NOT include a Warmup 3iE thermostat (from £144.99 inc 20% VAT). See page 22-23 for details.

Accessories	Price (incl 20% VAT)
Metal Fixing Bands - 25m	£48.99
Fixing Tape - 50m	£9.99

The recommended amount of metal fixing strip OR fixing tape for the inscreed wires is 1 metre of fixing for every 6 metres of wire.

Application*



*please note that there are a number of ways in which the Warmup Inscreed Wire may be installed. For details, please visit our website www.warmup.co.uk

Warmup Foil Heaters

The Warmup Foil Heater is a streamlined electric radiant floor heating system designed for use with laminate, carpet, vinyl*, engineered wood and other floating floors.

It can be conveniently installed under laminate and engineered wood in both dry and wet areas without the need for additional earth grids. We recommend using the Warmup Insulated Underlay and Dual Overlay Systems (See page 12-13) for maximum efficiency.



Features

- Installed directly under the floor finishes suggested above; no self-levelling required
- Fully earthed flat aluminium foil won't raise floor levels
- Wire based system can be adapted to fit around objects
- Great for heating under floating floors such as laminate and hardwood

* check with vinyl manufacturer for suitability of use with underfloor heating



Technical Data

- Construction: ECTFE wire encased in aluminium foil
- Operating voltage: 230V: 50Hz
- Output rating: 140W/m²
- Mat Width: 0.5m
- Mat Length: min 3m, max 24m
- Heating Cable Spacing: 50mm
- Cold Lead Length: 3m
- Approvals: BEAB
- European Compliant and CE marked
- 15-Year Warranty & SafetyNet™ Installation Guarantee



Price Guide

Area to be heated (m ²)	Heaters	Wattage	Amps	Price* (incl 20% VAT)
1	WLFH-140W/140	140W	0.61A	£72.99
1.5	WLFH-140W/210	210W	0.91A	£87.99
2	WLFH-140W/280	280W	1.22A	£113.99
3	WLFH-140W/420	420W	1.83A	£165.99
4	WLFH-140W/560	560W	2.43A	£207.99
5	WLFH-140W/700	700W	3.04A	£254.99
6	WLFH-140W/840	840W	3.65A	£300.99
7	WLFH-140W/980	980W	4.26A	£347.99
8	WLFH-140W/1120	1120W	4.87A	£394.99
9	WLFH-140W/1260	1260W	5.48A	£446.99
10	WLFH-140W/1400	1400W	6.09A	£493.99
12	WLFH-140W/1680	1680W	7.30A	£591.99

*Prices above **DO NOT** include a Warmup 3iE thermostat (from £144.99 inc 20% VAT). See page 22-23 for details.

MUST be used with Warmup Dual Overlay (see Page 13) when laying vinyl or carpet (excludes bathrooms).

A maximum of 25m² of heating can be used with one thermostat.

Application



The Warmup 3iE™

The world's most advanced energy-monitor thermostat - exclusively from Warmup



Upgrade to a lifetime of protection and peace of mind with Warmup's new Extended Warranty. Any replacement thermostat is also covered by the warranty and is fully transferrable. See warmup.co.uk for details.



Technical Data

- Output relay SPST or 1A inductive load: 16A, 3,600W
- Temperature range: 0 / +50 °C
- Programming function: 10 events & 10 temperatures / day
- Sensor type: NTC, 3m long
- Dimensions (H/W/D): 90 x 113 x 19mm (flush fit)
- Size of display: 2.4"
- Installation depth: 30mm
- IP rating is IP20/IP32* (*with optional gasket)
- Approvals: BEAB
- Standard 3-Year Warranty (Extended Warranty available)
- Patents Pending



Price Guide

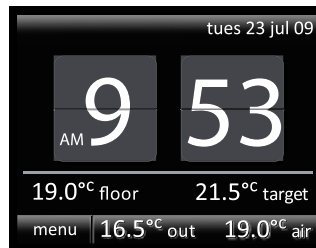
Energy-monitor Thermostats	Price (Incl 20% VAT)
3iE™ - Piano Black Programmable Thermostat	£144.99
3iE™ - Classic Cream Programmable Thermostat	£144.99
3iE™ - Silver Grey Programmable Thermostat	£155.99
3iE™ - Leaf Green Programmable Thermostat	£155.99
3iE™ - Madison Blue Programmable Thermostat	£155.99
3iE™ - Deep Pink Programmable Thermostat	£155.99
3iE™ - Warm Berry Programmable Thermostat	£155.99
3iE-LTW-CERT - 3iE Extended Warranty	£60.00

innovative

- First thermostat with a 2.4" full colour screen and integrated touch technology - patents pending
- Beautifully crafted piano black and classic cream fascias with chrome edging are perfectly in tune with the modern home environment
- Easy-to-use interface, banishing complicated instruction manuals to the dustbin

interactive

- Clear graphical display makes any adjustment quick and easy
- Choose the display style that suits you best - wide choice of screen themes



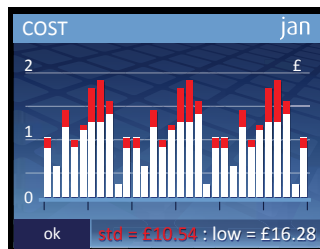
"flip clock" screen theme

intelligent

- Proportional Adaptive Function precisely activates the system when needed, perfectly balancing comfort with economy
- First thermostat to come with Active Energy Management™ (AEM™) - saving up to 10% on energy bills

energy efficient

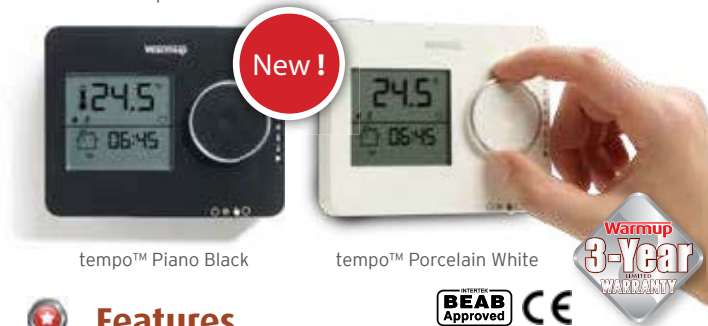
- Unrivalled accurate floor temperature control means no wasted energy - reducing the costs associated with over-heating
- Graphics-based energy monitor shows exactly how much energy is being used and when
- AEM™ prompts you to choose the best and most efficient temperature for each room



Energy Monitor - cost screen

Warmup Thermostats and Controls

See www.warmup.co.uk for more information



tempo™ Piano Black

tempo™ Porcelain White



Features

- Stylish and contemporary design
- Clear screen displaying programme details
- Easy control with dial and sliders
- Suitable for all Warmup electric underfloor heating systems



Technical Data

- Input voltage: 230V +/- 15% at 50Hz
- Maximum Output: 16A
- Built-in interrupter: 2-pole, 16A
- Sensors: Floor/air/external
- Dimensions (H/W/D): 90 x 113 x 23mm (flush fit)
- Clock function: 7-day, 1 day, 5/2 day
- Housing: IP 20
- Battery backup: 3 months (CR2032 battery provided)
- Screen display size (H/W): 50 x 45mm
- Approvals: BEAB
- European Compliant and CE marked
- 3-Year Warranty



XSTAT
Programmable
Thermostat



MSTAT
Manual Thermostat



RCD/Fused Spur
30mA Residual Current
Device Fused Spur



Price Guide

Programmable Thermostat	Price (incl 20% VAT)
tempo - Piano Black Programmable Thermostat	£99.99
tempo - Porcelain White Programmable Thermostat	£99.99
XSTAT - White Programmable Thermostat	£104.99
Manual Thermostats	Price (incl 20% VAT)
MSTAT - Manual Thermostat	£72.99
RCDs	Price (incl 20% VAT)
RCD/Fused Spur - 30mA Residual Current Device / Fused Spur	£49.99

Warmup Mirror Demisters



Warmup mirror demisters are a technologically advanced, permanent, safe and simple solution for steamed up mirrors - ideal in the bathroom.



Features

- Flat film does not take up space
- Self-adhesive for convenient installation directly onto the back of the mirror
- Connects to existing room light circuit for automatic operation when light is switched on
- Suitable with most types of mirrors, existing or newly installed
- Can be used in combination for larger areas
- Resistant to moisture, vibration, shock, dust and ageing



Technical Data

- IP57 Rated
- Suitable for zone 2 according to BS 7671:2008
- Operating voltage: 230V:50Hz
- 1m coldtail
- Double insulated
- No transformers or thermostats necessary
- European Compliant and CE marked
- 1-Year Warranty



Price Guide

Size & description	Wattage	Price (incl 20%VAT)
WMD1 - 400mm x 450mm	18W	£56.99
WMD2 - 600mm circular	55W	£77.99
WMD3 - 290mm x 290mm	27W	£41.99
WMD4 - 600mm x 1100mm	132W	£108.99

Warmup Electric Heated Towel Rails

Warmup heated towel rails are beautifully designed in the highest quality stainless steel. There are no liquids inside, so are maintenance-free and incredibly cheap to run.



Features

- No fuss - no liquids also mean no leaks, no top ups, no bleeding, no maintenance
- Even heat all at once
- Energy efficient, equivalent to just one light bulb
- Sleek contemporary design
- Discreet with concealed cable kit
- Versatile and easily installed into new or existing homes
- Comprehensive kit with all fixing accessories, including a diamond drill bit (for use on porcelain tiles), for installation convenience
- Approvals: European Compliant and CE marked
- Warranty: 5-Year Warranty



CE



HTR 680 x 450



HTR 800 x 600



STAINLESS STEEL



Technical Data

Model	HTR 680x450	HTR 800x600	HTR 800x600C
Cord exit location	left or right	left or right	left or right
Concealed Wiring			
Adaptor available	yes	yes	yes
Number of Bars	6	7	7
Height mm	680	800	800
Width mm	450	600	600
Depth mm	120	120	150
BTU output	188	341	341
Wattage	55	100	100
Amps @ 230Vac	0.23	0.43	0.43
IP Rating	IP34	IP34	IP34



Price Guide

	Price (incl 20%VAT)
HTR 680 x 450	£224.99
HTR 800 x 600	£280.00
HTR 800 x 600 - Curved bars	£319.99
Concealed Wiring Adaptor	£11.99



HTR 800 x 600 -
Curved bars



Rapid heat-up time



Low energy consumption

Warmup Case Studies

Warmup's commitment to excellence in quality and service is known worldwide. Our reputation has led to our being specified in some of the most prestigious sites around the globe.

CONNAUGHT HOTEL FEATURES WARMUP

The Connaught Hotel, one of London's elite 5-star hotels renowned for their exceptionally high standards of service and quality offerings, has installed Warmup underfloor heating in 100 of their bathrooms as well as their winter terrace.

They chose the Warmup matting system for its quick and extremely convenient installation.



WARMUP ADDS WARMTH TO WINTERY SPANISH DAYS

A brand new harbour-front development, Ribera del Marlin, saw the creation of 196 apartments fitted with luxurious finishes including Warmup underfloor heating in all 444 bathrooms. These are now truly comfortable apartments, 365 days-a-year.



WARMUP SELECTED FOR GIBRALTAR'S OCEAN VILLAGE

Warmup underfloor heating was snapped up for more than 300 bathrooms in Gibraltar's largest development.

Ocean Village is the biggest residential and leisure centre in Gibraltar, featuring exclusive waterside living and premium commercial



and recreational facilities.

MGM GRAND - MACAU CHOOSES WARMUP

Designers of the new MGM Grand Casino Resort in Macau chose Warmup to be the finishing touch to the luxury bathrooms in their suites and villas.

To deliver the quality and reliability Warmup is known for, a new made-to-measure product was introduced, allowing on-site workers to quickly and easily install a heater with a minimum of preparation time.



To add the affordable luxury of Warmup Underfloor Heating to your project, you can e-mail us at projects@warmup.com or contact our Projects Division directly on 0208 453 6823.

Frequently Asked Questions

I am new to electric underfloor heating, how do I work out what I need?

Please see page 1 to find a simple grid that will tell you which one of our products suits the floor surface that you are planning to have. Once you have decided on the product, go to the relevant section to see which size of heater you need. For more details including the simple to use Warmup Online Planner go to www.warmup.co.uk.

What should I look for when comparing electric floor heating companies?

A confidence in the quality of the heaters they make. For ease of use, long term reliability and robustness - compare wire types. In particular ask if the wire in question is 2mm thick and coated on the inside and outside with a hard material like ETFE or a soft one like PVC. Warmup's wire is industry-leading in all these areas and comes with a lifetime warranty. PVC based wires only come with a 10-year guarantee - for a good reason.

When do I use a system rated at 200 watts per sq. metre?

We recommend using 200 watt per sq. metre mats in areas that are:

- Not normally run on a timer, so that an especially fast heat-up time is required, or
- In rooms where you have been unable to install Warmup Insulation Board (WIB). However, we highly recommend the use of WIB, especially on concrete subfloors.

When would you use a loose heated cable instead of a heated cable mat?

For small or irregular areas like bathrooms a single heating cable is easier to use. With larger, more regular areas mats are often quicker to install.

Can Warmup underfloor heating cables be cut to length if too long?

Under no circumstances can Warmup underfloor heating loose wires or mats be cut to length.

Will electric underfloor heating also warm my room?

Warmup systems heat the room as well as warm the floor. This is accurately controlled by the new and unique 3iE thermostat. The difference between the temperature of the floor and the radiant warm feeling in the room will depend on the use of Warmup Insulation Board and the insulation properties of the room.

How long does it take a Warmup heating system to heat up?

Heat-up times will depend greatly on whether or not Warmup Insulation Board (WIB) has been used. See the table below for a guide:

Heat-up times

Subfloor Construction	Heat-up Time
WBP Plywood	45 min
WBP Plywood with WIB	20 min
Insulated concrete (insulation under screed)	2-5 hours
Un-insulated Concrete	2-8 hours
Concrete with 10mm WIB	25 min
Concrete with 50mm WIB	20 min

How controllable are the Warmup Heating Systems?

The new and exclusive market-leading Warmup 3iE thermostat provides totally precise floor and air temperature control (with 2 sensors) and can be pre-programmed to suit all your requirements. See www.warmup.co.uk for full functionality and operating instructions.

Who can install my Warmup Heating System and what do they need?

Warmup systems are designed to be simple enough for a competent DIY'er to install. It is important that the connection of the heater to the mains system of the house is carried out by a qualified electrician.

Can I tile straight on top of the heating systems?

Yes. Unlike other less robust wire systems, we believe you should tile straight on top, saving the time and expense of screeding over the wires first.

How much extra height should I allow for my floor cable heating system and Warmup Insulation Board?

You should allow 6, 10, 20 or 50mm depending on the board thickness, plus another 2-3mm for adhesive.

What if I am planning to build abroad? Can I still install Warmup heating?

Absolutely! We have offices all over the globe. Simply call us on 0845 345 2288 or visit our website at www.warmup.co.uk for a list of our foreign offices. All Warmup offices can serve you in English.

Running Cost Information

How much will it cost to heat my room?

Running costs will always depend on the room size and the running time, as well as how well the room is insulated. To get an accurate idea of typical running costs, see the table and notes below:

Cost (in pence) of running a Warmup Heating System as sole-source heating:

Hours	Heated area in square metres					
	2	4	5	10	15	25
1	1.7p	3.5p	4.3p	8.7p	13.0p	21.7p
2	3.2p	6.3p	7.9p	15.8p	23.7p	39.5p
3	4.6p	9.2p	11.5p	22.9p	34.4p	57.4p
4	6.0p	11.9p	14.9p	29.8p	44.6p	74.4p
5	7.4p	14.9p	18.6p	37.2p	55.8p	93.0p
6	8.8p	17.5p	21.9p	43.9p	65.8p	109.7p
7	10.2p	20.5p	25.6p	51.2p	76.7p	127.9p
8	11.6p	23.3p	29.1p	58.1p	87.2p	145.4p

Save money by insulating properly and reducing heat-up times:

During the heat-up period, as the floor reaches its set temperature, the heater is running at full power. After this period, the heater needs to run at only half-power to maintain the set temperature. Simply put, the faster the floor heats-up, the cheaper the system is to run.

By properly insulating your floor with Warmup Insulation Board, you can reduce the heat-up period significantly (see page 10), thereby reducing running costs by as much as 50%.

Accuracy of running costs:

Warmup tested its heaters, running under normal operating conditions, in a special room built to EN442-2 specifications. The data collected from this extensive testing allows us to state with certainty, exactly what our operating costs are.

Please note that these tests were performed using Warmup heaters and that this data is accurate for Warmup heaters only.

Assumptions and variables:

To calculate accurate running costs, we have made the following reasonable assumptions:

1. Installation is in a house built to current Part L regulations
2. Heaters used: 150W/m² mats, under 8-10mm ceramic tile on 10mm Warmup Insulation Board
3. The temperature difference between "on" and "standby" is 5°C (e.g. 16°C when on "standby", 21°C when "on")
4. The floor coverage is consistent to property size (e.g. 5m² of heating for a 5m² room)
5. The heat up time is included within the hours ON
6. The heating is controlled by a Warmup thermostat
7. Price per kWh is 9.3p (lowest UK electricity price available at time of editing - November, 2011)

Notice: Any unauthorised replication of this material, including running cost data, will constitute an infringement of copyright.

Our Service

We hope you'll never need them, but if you ever have a problem with your system, such as someone drilling through a wire, our team of engineers can come to the rescue. These trained and experienced professionals are on call 24/7/365, nationwide.

At Warmup, we manufacture our own heaters, not just import them, so we know how they work and we know how to fix them. In addition, you'll always have our market-leading warranties to rely on.

Our Warranties

Warmup systems are the **only** heaters on the market that are European Compliant, CE marked and accredited by **all** these leading institutions whose safety marks are recognised worldwide: ASTA BEAB, KEMA, UL, CSA, SEMKO, GS and VDE.

Our confidence in our products allows you to enjoy two original and comprehensive backup policies with us.

Warmup Undertile Heating systems carry a **Lifetime Warranty**.* These heaters are warranted for the lifetime of the floor covering under which they are fitted, so you have greater peace of mind.

Plus, Warmup offers an Extended Warranty option on the 3iE Energy Monitor Thermostat range.

Our installation methods are straight-forward, but accidents do happen. For such instances, Warmup has in place a unique **SafetyNet™ Installation Guarantee**.



If you have followed all recommended installation procedures in the installation manual, but unintentionally cut or damage your new heater before tiling, return the damaged heater to Warmup within 30 days with your original date sales receipt and we will replace any pre-tiled heater (maximum 1 heater) with another heater of the same make and model **FREE**!**

NO OTHER COMPANY OFFERS THIS GUARANTEE.



**For more details on our different warranties, please visit our website www.warmup.co.uk



Cleaner Energy

Climate change and concerns over the security of fossil fuel supplies are forcing changes in regulations and accepted best practice. Builders and architects are now required to build and design homes that are highly insulated and require less energy.

Renewable energy derived from wind, water, sunlight and biosources will play a major role in reaching the goal of 15% renewable energy use by 2010 in the UK and 20% by 2020 in Europe.

Technologies such as electric underfloor heating are ideally suited to take advantage of the shift to clean energy. It not only makes ecological sense, but economical sense to prepare for a new era of clean, renewable fuel by installing electric floor heating.

For more information on how to get ready for renewable energy, please visit our website at warmup.co.uk.

Over 1.5 million installations in more than 57 countries

United Kingdom		warmup.co.uk
United States		warmup.com
Brazil		warmupbrasil.com.br
Canada		warmup.ca
Chile		warmup.cl
Cyprus		warmup.com.cy
France		warmupfrance.fr
Germany		warmupdeutschland.de
Greece		warmup.com.gr
Ireland		warmup.ie
Italy		warmupitalia.it
Netherlands		warmupnederland.nl
Poland		warmup.pl
Portugal		warmup.pt
Romania		warmupromania.ro
Spain		warmup.es
Turkey		warmup.com.tr

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