





## **Table of Contents**

Why Warmup®	Page
System Summary Guide	3
Warmup's Unique Product Advantage and the Best Warranties, Installation Guarantee and Accreditations	4 -5
About Warmup and our Services	6 - 7
World Leading Research and Development	8
Benefits of Underfloor Heating	9
Warmup® Electric Floor and Wall Heating	Page
4 Easy Steps to Calculate your Underfloor Heating Requirements	10 - 11
Heating Systems	12 - 31
Warmup® Cement Coated Tough Insulation Boards	32 - 35
Warmup® Insulated Underlay/Dual Overlay	36 - 39
Warmup® Electric In-Wall Heating Panel	40 - 41
Thermostats	Dago
<u> </u>	Page
Warmup® Smart Devices	43
Warmup® Smart Devices  Warmup® 4iE Smart WiFi Thermostat	
·	43
Warmup® 4iE Smart WiFi Thermostat	43 44 - 47
Warmup® 4iE Smart WiFi Thermostat  Warmup® 4iE +Kit	43 44 - 47 48 - 49
Warmup® 4iE Smart WiFi Thermostat  Warmup® 4iE +Kit  Warmup® 3iE Energy-Monitor Thermostat	43 44 - 47 48 - 49 50 - 53
Warmup® 4iE Smart WiFi Thermostat  Warmup® 4iE +Kit  Warmup® 3iE Energy-Monitor Thermostat  Warmup® Tempo Digital Thermostat	43 44 - 47 48 - 49 50 - 53 54 - 55
Warmup® 4iE Smart WiFi Thermostat  Warmup® 4iE +Kit  Warmup® 3iE Energy-Monitor Thermostat  Warmup® Tempo Digital Thermostat  Bathroom	43 44 - 47 48 - 49 50 - 53 54 - 55 Page
Warmup® 4iE Smart WiFi Thermostat  Warmup® 4iE +Kit  Warmup® 3iE Energy-Monitor Thermostat  Warmup® Tempo Digital Thermostat  Bathroom  Warmup® Mirror Demisters	43 44 - 47 48 - 49 50 - 53 54 - 55 Page 56 - 57
Warmup® 4iE Smart WiFi Thermostat  Warmup® 4iE +Kit  Warmup® 3iE Energy-Monitor Thermostat  Warmup® Tempo Digital Thermostat  Bathroom  Warmup® Mirror Demisters  Warmup® Electric Towel Rails	43 44 - 47 48 - 49 50 - 53 54 - 55 Page 56 - 57 58 - 59





62 - 63

Call us now 0345 345 2288 or visit www.warmup.co.uk





**(** 

Patio Heaters

## **System Summary Guide**

Whatever the floor finish or subfloor construction, Warmup has the right underfloor heating solution to match your specific needs. Use the table below to find out which products best suit your floor type. Contact us on 0345 345 2288 should you require further information.

			Warmup Electric Products				
		DCM- PRO	Loose Wire	Sticky Mat 150 Watt	Sticky Mat 200 Watt	Inscreed Cable	Foil Heater
	Page Number	12	16	20	20	24	28
	Tile & Stone	1	1	✓	1	1	
гүрЕ	Hardwood	1				✓	1
FLOORING TYPE	Laminate	1				1	<b>✓</b>
FLOC	Carpet	✓				✓	✓
	Vinyl	1				1	✓





Call us on **0345 345 2288** to discover how we can help or chat with us online at www.warmup.co.uk

Warmup is fully tested and compatible for use with wood floors and vinyl including leading brands like:







The world's **best-selling** floor heating brand

3

## Warmup's Unique Product Advantage



Warmup® offers the thinnest dual-fluoropolymer coated multi-strand heating wire (less than 1.8mm in diameter) on the market - to enable you to offer your customers the very best solution. Further, it will not raise floor levels and is BEAB approved, meeting the highest safety standards. Best of all, it is quick and easy to install.



- 1. Multi-strand twin conductors/heating element
- 2. Inner Insulation: advanced fluoropolymer
- 3. Earth Braid
- 4. Diameter 1.8mm
- 5. Outer Insulation: advanced fluoropolymer



## **Controls**

Warmup offers a comprehensive range of controls and has extended its portfolio with the launch of the 4iE® Smart WiFi Thermostat - suitable for radiator and underfloor heating systems.



The smart ways the 4iE® finds to heat homes more efficiently could save homeowners up to 25% of their heating usage, and in addition to this built in EasySwitch™ saves on average a further £330 (Source: CMA, June 2016)



\*Upgrade for just £29.99 inc. VAT at www.warmup.co.uk

Call us now 0345 345 2288 or visit www.warmup.co.uk



<del>( ( )</del>

## The Best Warranties, Installation **Guarantee and Accreditations**

Warmup® Loose Wire, StickyMat, PEX-A Systems carry a Lifetime Warranty for greater peace of mind.

A Lifetime Warranty upgrade is available on the 4iE Smart WiFi Thermostat, 3iE Energy-Monitor Thermostat and Tempo Digital **Programmable Thermostat.** 



\*Visit www.warmup.co.uk for details



If you accidentally damage the heating system during installation, return it to Warmup and we will replace it with another heater of the same make and model FREE!

(See www.warmup.co.uk for full details)



<del>( ( )</del>











Rest assured, you are installing the very best. Warmup is the only underfloor heating company whose products are European compliant, CE marked and accredited by all these independent institutions. In addition, we are members of BEAMA, CIBSE, Constructionline, RIBA, and the TTA.













17th Edition Approved. All Warmup products comply with 17th Edition of the IET Electrical Requirements BS7671

## **About Warmup®**

Warmup® is a certified ISO 9001:2008 UK based manufacturing Plc creating and delivering underfloor heating solutions (electric, hydronic and hybrid - a mixture of both). We have sold in excess of 2 million systems in more than 60 countries in over 20 years of trading. We have subsidiary operations in 11 countries and licensed trading partners in the other countries.

The combination of Warmup's heating wire with fluoropolymer coatings (on the inner wires and the outer protective jacket), our 4iE® Smart WiFi Thermostat, 3iE® Energy-Monitor Thermostat and Tempo Digital Programmable Thermostat are patented, trade mark protected, designed and owned by the world's best selling brand.

We began as, and remain, a knowledge and research driven UK business, making proprietary, world-leading products.

Warmup has a tradition for quality and innovation. We constantly update and add to our product range to deliver the absolute best products.

Warmup is the only underfloor heating company whose products are European compliant, CE marked and accredited by more independent institutions than anyone else in the industry, giving you and your customers security and peace of mind.







## **Our Services**

We are with you every step of the way. Since 1994, Warmup has provided trade professionals with outstanding services and quality products through leading retailers, wholesalers and builder merchants. This includes:

## **Unique Online "Quick Quote" Service**

Let us save you time by calculating the right product, price and size required for your project. All you need to do is visit our website, enter a few project details for a no-obligation "Quick Quote". You will receive a quotation estimate within a few minutes. Should you require a more detailed quotation, you can submit your drawings or plans to www.warmup.co.uk or via fax on 0345 345 2299.

#### **Technical Helpline**

We are the **only company** who offers a technical helpline 24/7/365. If you have a question or an installation problem, our experienced Technical Team are available to support you - call 0345 345 2288. We also offer online 'live' chat and a host of installation tutorials www.warmup.co.uk

Call us now 0345 345 2288 or visit www.warmup.co.uk

 $\bigoplus$ 

#### **Repair Kits**

Minor damage (i.e. nicking the electric wire with a trowel), discovered before the floor is laid, can easily be repaired on-site. Call 0345 345 2288 to obtain an easy-to-fit repair kit, via next-day delivery (or keep a few extra available).

#### Running Cost Information

To get an accurate idea of typical running costs of a Warmup System, see the table below.

	2m²	4m <sup>2</sup>	5m²	10m <sup>2</sup>	15m <sup>2</sup>	25m <sup>2</sup>
1 hr	2.36p	4.72p	5.90p	11.81p	17.71p	29.52p
2 hrs	4.30p	8.61p	10.76p	21.52p	32.28p	53.81p
3 hrs	6.25p	12.49p	15.62p	31.23p	46.85p	78.08p
4 hrs	8.10p	16.20p	20.26p	40.51p	60.77p	101.28p
5 hrs	10.13p	20.26p	25.32p	50.64p	75.96p	126.60p
6 hrs	11.94p	23.89p	29.86	59.72p	89.59p	149.31p
7 hrs	13.93p	27.85	34.82p	69.63p	104.45p	174.08p
8 hrs	15.83p	31.66p	39.57p	79.15p	118.72p	197.87p

Financial figures in UK pence

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

#### Rapid Delivery

<del>( )</del>

If you need products quickly, ask your supplier to place your order by 4.30pm, Monday-Friday and we will ship it the same day for next-working-day delivery (allow 2-3 days for Scotland and the Channel Islands). Warmup is fully stocked and available from leading retailers and trade outlets, throughout the UK.

#### Warmup® Service Engineers

Should your customer's heating system become damaged after installation, we offer a team of experienced service engineers, who will identify and correct the damage. Call Warmup on 0345 345 2288 to arrange an appointment.

#### **Quotation & Layout Service**

Warmup offers a FREE CAD drawing and quotation service to all customers, regardless of project size. All you need to do is fax your drawing to 0345 345 2299, email uk@warmup.com or visit www. warmup.co.uk to access our quotation facility and Warmup will do the rest.

#### **Training**

Warmup provides group training sessions for any sized project, held at our Head Office in London. Let our trained professionals show you how quick and easy it is to install Warmup with no need for specialist trades. It's FREE - why not upgrade your skills and stand out from your competitors? Call 0345 345 2288 or email training@warmup.com for details.



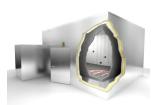
## **World Leading Research & Development**

By continually investing in research and development, Warmup® is able to foresee and respond to upcoming industry trends and technological developments. This guarantees you fast access to the latest innovations when it comes to underfloor heating design, energy efficiency and reducing CO<sup>2</sup> emissions.

#### Warmup® Monitored Family Homes Programme

In support of our EN442-2 Research Centre in Germany, we operate a number of Family Monitored Houses in addition to the BRE (Building Research Establishment) Renewable House.

This initiative grew out of the need to better predict the future energy running costs of houses using Warmup underfloor heating systems. Information is gathered every few minutes from many tiny





Bi-climatic chamber in Warmup's Research Centre in Germany



These sensors are strategically placed in each zone to compare floor, wire/water and outside temperatures and often other readings like humidity and radiant temperature. This allows a detailed view of the amount of energy actually needed to create ideal living conditions.

This can be compared with test facility results and in particular, what may have been predicted by SAP (Standard Assessment Procedure) calculations, which are central to the perceived energy performance and efficiency of a dwelling.

This information allows us to answer questions from 'How much will it cost to run Warmup in my new house?' to 'How much will I save using Warmup underfloor heating rather than radiators in my

#### How much does underfloor heating cost to heat my room?

RUNNING TIME							
ROOM TYPE	HEATED AREA	AM PM		WINTER COST*			
Bathroom	4m²	2hrs	1hr	£24.26			
Kitchen	5m²	1hr	2hrs	£30.33			
Lounge	15m²	0hrs	3hrs	£85.27			

<sup>\*</sup>Assumptions: 12.66p/kWh - system on 6 months (182 days) per year. System installed on 10mm Warmup® Insulation Board. \*\*Avg. running cost after initial heat-up period = 0.85p/m²/hr.
For more details visit www.warmup.co.uk

Call us now 0345 345 2288 or visit www.warmup.co.uk



 $\bigoplus$ 

## **Benefits of Underfloor Heating**

Floor heating is simply the only way to create the ideal comfort zone in a family room to balance floor and air temperature.

 $\bigoplus$ 

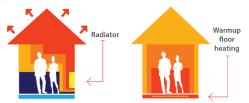
Suitable for every type of project - new-build, refurbishments and renovations.

Appropriate for use under a wide range of floor finishes - stone, tile, wood, carpet and vinyl.

Warmup is fully tested and compatible for use with Karndean and

With its low operating temperature, warmth is evenly spread across the whole floor area, with no cold spots, heating from the floor upwards without creating a stuffy atmosphere.

**Energy efficiency** - underfloor heating gives the user control, provides rapid heat-up and high efficiency heating. It requires significantly less energy as you are not heating the ceiling area and it enables the temperature to be accurately controlled as needed, allowing end users to heat the room(s) they want, with no energy wasted.



Temperature control in each zone - comprehensive range of thermostats, including the 4iE® Smart WiFi Thermostat, allows the end user to choose the temperature levels they require, with programmable settings (heat on/off) to match their lifestyle.

Cost savings - because underfloor heating uses a lower temperature than standard radiators, heating costs are reduced and savings can be achieved by at least 10% on utility bills.

**Design freedom** - underfloor heating means no bulky radiators to take up valuable wall and floor space.

Safety - delivers a family-friendly and safe environment. No low level hot surfaces or hard metal edges that come with a radiator system, creating a potentially unsafe and dangerous environment for small children, the elderly or people at risk.

No maintenance - there is no maintenance required for electric underfloor heating and little or no maintenance required on our hydronic systems.

Hydronic underfloor heating can be linked to most heat sources, giving total flexibility - allowing for best energy savings as new energy efficient heat generators become available, now and in the future.

The world's **best-selling** floor heating brand



<del>( )</del>

 $\bigoplus$ 

## 4 Easy Steps to Calculate your **Underfloor Heating Requirements** for Electric Systems







To calculate the underfloor heating system(s) you require for your room(s), you need to determine the working floor space available to you. This is the total amount of floor space less the area taken up by any fixed objects, i.e. kitchen units, bath etc. You only need to heat the area you will be walking on.



We would recommend that you allow a 5 centimetre (2 inch) gap between the walls and the area where you intend to install the heating system.



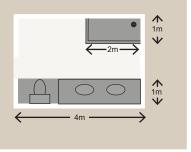
Work out the total floor area. If the overall room is rectangle in shape, say 4m by 3m - all you need to do is multiply both numbers - which gives you 12 sqm.

Call us now 0345 345 2288 or visit www.warmup.co.uk

<del>( ( )</del>

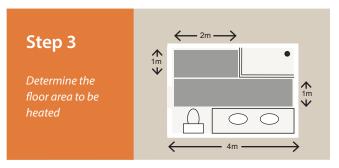


area taken up by furniture

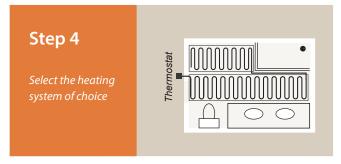


Work out how much of the floor space is taken up by fixed objects, i.e., in your kitchen - start with the big items and finish with small items. For example, assume you have kitchen floor units 600mm in depth x 3m long; a free standing fridge, 600mm x 600mm. You need to calculate these areas i.e, 0.6m x 3.0m = 1.8sqm and  $0.6m \times 0.6m = 1.2$ sqm = Total area 3.0sqm.

**(** 



From Step 1 and Step 2 you now know the amount of fixed space: Step 1: 12 sgm Step 2 = 3 sgm



Now calculate the amount of free floor space for your Warmup cable or mat:

Floor space = 12 sqm - 3 sqm = 9 sqm. Therefore, 9sqm is what you require from your chosen Warmup system.

The world's **best-selling** floor heating brand

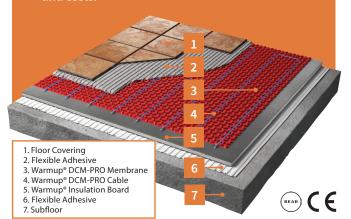
<del>( )</del>



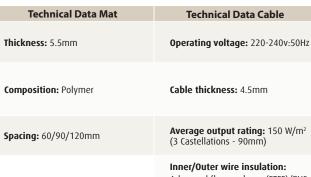
## Warmup° DCM-PRO

# NEW!

The DCM-PRO is the fastest way to install a heated decoupling system in all areas; infact 40% faster than standard underfloor heating membranes. The patent pending self-adhesive underside acts as a self-healing decoupling layer and eliminates the need for an adhesive layer, reducing both time and costs.









Advanced fluoropolymer(ETFE)/PVC

Single 3m long 'cold tail' connection lead

IP Rating: IPX7

Approvals: BEAB

Lifetime Warranty & SafetyNet™ Installation Guarantee



## **Frequently Asked Questions**

#### Can the DCM-PRO system reduce the risk of my tiled floor developing cracks?

As a decoupling system, the DCM-PRO has been designed to absorb the normal lateral movement which occurs when the subfloor and finished floor expand and contract at different rates. This has been backed up with a 'High Performance' rating for crack isolation, as externally tested according to ANSI 118.12.5.4 (American National Standards Institute, www.ansi.org).

#### How does the DCM-PRO cable fit into the DCM-PRO mat?

The DCM-PRO cable clips into the castellations of the DCM-PRO mat. No tools are required when installing the cable into the mat. It is easily installed by running your thumb along the top of the cable to guide it into the castellations.

#### Do I need to use primer when installing the DCM-PRO system?

If the DCM-PRO is being laid directly onto a plywood or concrete subfloor, an SBR primer is required at a ratio of 1:4. If an insulated or standard tile backer board is being used, no primer is needed. We recommend you use Warmup insulation boards.

#### How quickly can I lay floor finish onto the DCM-PRO?

Straight away. One of the main advantages of the self-adhesive properties of the DCM-PRO is no waiting time. As soon as the mat is fitted, cable installed and cable resistance checked, tiling or self-levelling can be started.

#### Can the DCM-PRO system be used in a wet room?

Yes. With the addition of the DCM-PRO waterproofing tape installed following the recommended installation method, set out in the installation guide, the system is waterproof and can be used in a full wet room environment.



Installation video for Warmup® DCM-PRO Always refer to the installation manual prior to commencing your project.

The world's **best-selling** floor heating brand



<del>( )</del>

 $^{igothampio}$ 

## **DCM-PRO Mat Price Guide**

Product Code	Format	Length (m)	Width (m)	Area Covered (m²)	Price (Excl. 20% VAT)
DCM-M-1	Sheets	1	1	1	£16.66
DCM-M-15	Rolls	15	1	15	£249.99

150W/m<sup>2</sup>

~130W/m²

7.0

8.2

9.3

10.5

11.7

14.0

16.3

18.7

8.0

9.3

10.7

12.0

13.3

16.0

18.7

21.3

£275.00

£308.33

£341.67

£383.33

£429.17

£483.33

£550.00

£625.00

115W/m<sup>2</sup>

## **DCM-PRO Cable Price Guide**

~190W/m²

230W/m<sup>2</sup>

Output

Spacing	60mm	60/90mm	90mm*	90/120mm	120mm	
Castellations	2	2/3	3	3/4	4	
Product Code	Area Covered (m²)	Area Covered (m²)	Area Covered (m²)	Area Covered (m²)	Area Covered (m²)	Price (Excl. 20% VAT)
DCM-C-1	0.7	0.8	1.0	1.2	1.3	£95.83
DCM-C-1.5	1.0	1.3	1.5	1.8	2.0	£104.17
DCM-C-2	1.3	1.7	2.0	2.3	2.7	£125.00
DCM-C-2.5	1.7	2.1	2.5	2.9	3.3	£141.67
DCM-C-3	2.0	2.5	3.0	3.5	4.0	£158.23
DCM-C-3.5	2.3	2.9	3.5	4.1	4.7	£179.17
DCM-C-4	2.7	3.3	4.0	4.7	5.3	£200.00
DCM-C-4.5	3.0	3.8	4.5	5.3	6.0	£220.83
DCM-C-5	3.3	4.2		5.8	6.7	£250.00

DCM-C-6

DCM-C-7

DCM-C-8

DCM-C-9

DCM-C-10

DCM-C-12

DCM-C-14

DCM-C-16

4.0

4.7

5.3

6.0

6.7

8.0

9.3

10.7

5.0

5.8

6.7

7.5

8.3

10.0

11.7

13.3

<sup>\*</sup>recommended spacing

## DCM-PRO Accessories Price Guide

Product Code	Description	Length (varies)	Height (mm)	Width (mm)	Thickness (mm)	Price (Excl. 20% VAT)
DCM-E-25	Perimeter Strip	25m	30	-	10	£20.83
DCM-T-10	Waterproofing Tape	10m	120	-	1	£25.00
DCM-R-I	Internal Corner	120mm	60	120	1	£5.42
DCM-R-E	External Corner	120mm	60	120	1	£5.42

**(** 

## **Protects Floor from Damage**

Rated as high performance, the DCM-PRO is proven to protect tiled floors from cracking (ANSI 118.12.5.4).

Unlike traditional fabric-based decoupling layers which tear upon movement, the patent pending self-healing decoupling layer contracts and expands to deal with seasonal changes, preventing damage occurring from gaps and cracks in the subfloor.



Protects floor surface from damage caused by subfloor movement.



Patent pending adhesive layer slides and stretches with expansion.



Adhesive layer contracts and self-heals if gap shrinks due to seasonal changes (typical for wood subfloors).

## **Convenient Sizing**

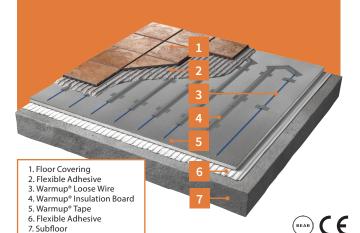
- 1m<sup>2</sup> of cable fits exactly 1m<sup>2</sup> of membrane at the recommended 90mm spacing
- · Can be adjusted to increase or decrease coverage and power:
  - 230 Watts per m<sup>2</sup> based on 2 castellations
  - 190 Watts per m<sup>2</sup> based on alternate 2 or 3 castellations
  - 150 Watts per m<sup>2</sup> based on 3 castellations (recommended)
  - 130 Watts per m<sup>2</sup> based on alternate 3 or 4 castellations
  - 115 Watts per m<sup>2</sup> based on 4 castellations





## Warmup° Loose Wire System

Warmup® Loose Wire System 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.







**Technical Data** 

Ultra-thin dual-core heating element will not raise floor levels

Operating voltage: 230V: 50Hz

The thinnest dual-fluoropolymer coated heating wire (less than 1.8mm diameter)

Cable thickness: 1.8mm

BEAB approved heating element meets the highest safety standards

Average output rating: 150 W/m<sup>2</sup>

Quick installation - Single connection lead for fewer steps

Inner/Outer wire insulation: Advanced fluoropolymer



Single 3m long 'cold tail' connection lead



**Approvals: BEAB** 

European compliant and CE marked

Lifetime Warranty & SafetyNet™ Installation Guarantee



## **Price Guide**

Area Heated	Heaters	Wattage	Amps	Price (Excl. 20% VAT)
1.5 to 2.4m <sup>2</sup>	DWS300	300W	1.30A	£106.66
2.5 to 3.4m <sup>2</sup>	DWS400	400W	1.80A	£126.66
3.5 to 4.4m <sup>2</sup>	DWS600	600W	2.61A	£185.83
4.5 to 5.9m <sup>2</sup>	DWS800	800W	3.48A	£239.99
6.0 to 6.9m <sup>2</sup>	DWS600 + DWS400	1000W	4.41A	£312.48
7.0 to 8.4m <sup>2</sup>	2 x DWS600	1200W	5.22A	£371.65
8.5 to 9.9m <sup>2</sup>	DWS800 +DWS600	1400W	6.09A	£425.82
10 to 11.4m <sup>2</sup>	2 x DWS800	1600W	6.96A	£479.98
11.5 to 12.9m <sup>2</sup>	DWS800 + DWS600 +DWS400	1800W	7.89A	£552.48
13.0 to 14.4m <sup>2</sup>	2 x DWS800 + DWS400	2000W	8.76A	£606.64
14.5 to 15.9m <sup>2</sup>	2 x DWS800 + DWS600	2200W	9.57A	£665.81
16.0 to 17.4m <sup>2</sup>	3 x DWS800	2400W	10.43A	£719.98
17.5 to 18.9m <sup>2</sup>	2 x DWS800 + DWS600 + DWS400	2600W	11.37A	£792.47
19.0 to 20.4m <sup>2</sup>	3 x DWS800 + DWS400	2800W	12.24A	£846.63
20.5 to 21.9m <sup>2</sup>	3 x DWS800 + DWS600	3000W	13.04A	£905.80
22.0 to 25m <sup>2</sup>	4 x DWS800	3200W	13.91A	£959.97

\*Prices above **DO NOT** include a Warmup thermostat. (See pages 36 - 45 for details).



Installation video for Warmup Loose Wire System. Always refer to the installation manual prior to commencing your project.



## Installation Guide

#### (Refer to installation manual for complete instructions)

Ensure the subfloor is smooth, clean and dry. We recommend you install Warmup® Insulation Boards for energy efficiency, but if you do not, paint the floor with the Warmup primer and allow to dry. Mark the perimeter and heater spacings on the floor using the sizing guide at the back of the installation manual.

#### Laying the Loose Wire System

Tape the joint to the start point on the floor and lay out the wire in parallel lines with U-shape returns. Tape and secure the heating wire to the floor with the adhesive tape provided. Ensure an even coverage with a minimum of 50mm spacing. Once completed, tape down the entire length of the heating wire.



## <del>( )</del>

#### Connecting to the power supply

**NOTE:** All electrical connections must be performed by a certified electrician.

Chisel out channels for the power supply cable and floor sensor probe and secure with fixing tape. Wire the thermostat, following the instructions provided.

#### Completing the job

Apply a full bed of flexible tile adhesive over the taped wire and tile as normal, taking care not to damage or dislodge the heating wire. Grout the floor as soon as possible and allow the adhesive to fully dry before switching on the heater.



- 1. Multi-strand twin conductors heating element
- 2. Inner Insulation: advanced fluoropolymer
- 3 Farth Braid
- 4. Diameter 1.8mm
- 5. Outer Insulation: advanced fluoropolymer



## **Frequently Asked Questions**

#### Can I use the Warmup® Loose Wire System as a primary heat source?

If your room is well insulated and complies with modern insulation levels you should be able to use Warmup as the sole heat source. However, if your house is an older property with lower insulation properties it is likely that an additional heat source may be required. Heat loss calculations can be carried out by a builder, architect or heating engineer.

#### What type of flooring can I use over the Loose Wire System?

The Loose Wire System is specifically designed for use under tiles and natural stone. Consult the chart on page 3 - Warmup has a range of heating systems for virtually any floor finish.

#### What can I do if the heater is too big for my area?

Warmup® Loose Wire gives you the flexibility to alter the wire spacing. The spacings between each run of heating element can be brought down to a minimum of 50mm and a maximum of 100mm.

NOTE: The heating wire cannot be shortened or cut at any **stage.** The correct size heater should be purchased for the floor area to be heated (e.g. the net heated area after all fixed units have been subtracted). If in doubt, call 0345 345 2288 and let our trained staff advise vou.

#### Should I use primer with the Loose Wire System?

If the heating element is being laid directly onto a plywood or concrete subfloor, use the primer supplied. Leave to dry for 2 - 3 hours until tacky, then lay the heating element. If an insulated or standard tile backer board is being used, no primer is needed. We recommend you use Warmup Insulation Boards.

#### How long after installation can I turn the heaters on?

The flexible tile adhesive **must** be fully dried before the underfloor heating can be turned on. Allow a minimum of 7 - 10 days. Turning the system on too early can force the flexible tile adhesive to dry too quickly, causing it to crack.



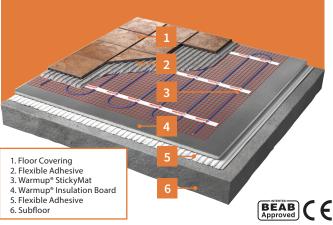
The world's **best-selling** floor heating brand

<del>( ( )</del>



## Warmup° 150W & 200W/m<sup>2</sup> StickyMat System

Warmup<sup>®</sup> StickyMat underfloor heating system is suitable for all projects: new-build, retrofits and refurbishments. The StickyMat System consists of a thin loose wire evenly spaced and taped to a glassfibre mesh with pressure sensitive adhesive, reducing installation time by 35%, for the fastest and most secure installation method of electric underfloor heating.







The thinnest dual-fluoropolymer coated heating wire (less than 1.8mm diameter)

StickyMat with pressure sensitive adhesive, for the fastest and most secure installation

**Features** 

Can be repositioned easily without losing adhesion

The pressure sensitive adhesive ensures that no wire or mesh is raised when tiling or covering with a self-levelling compound



Operating voltage: 230V: 50Hz

Width: 500mm (0.5 metre)

Mat thickness: 3mm

#### Inner/Outer wire insulation: advanced fluoropolymer

Output rating: 150W/m<sup>2</sup> and 200W/m<sup>2</sup>

Single 3m long 'cold tail' connection

Approvals: BEAB

European compliant and CE marked

Lifetime Warranty & SafetyNet™ Installation Guarantee



## **Price Guide**

#### Price Guide for 150W/m<sup>2</sup> Underfloor Heating StickyMat

Area Heated	Heaters	Wattage	Amps	Price (Excl. 20% VAT)
1m²	SPM1	150W	0.65A	£86.24
1.5m <sup>2</sup>	SPM1.5	225W	0.98A	£108.33
2m <sup>2</sup>	SPM2	300W	1.30A	£123.74
2.5m <sup>2</sup>	SPM2.5	375W	1.63A	£152.08
3m <sup>2</sup>	SPM3	450W	1.96A	£176.24
3.5m <sup>2</sup>	SPM3.5	525W	2.28A	£197.91
4m <sup>2</sup>	SPM4	600W	2.61A	£219.16
4.5m <sup>2</sup>	SPM4.5	675W	2.93A	£240.83
5m <sup>2</sup>	SPM5	750W	3.26A	£266.66
6m <sup>2</sup>	SPM6	900W	3.91A	£314.58
7m <sup>2</sup>	SPM7	1050W	4.57A	£362.08
8m²	SPM8	1200W	5.22A	£395.41
9m²	SPM9	1350W	5.87A	£429.16
10m <sup>2</sup>	SPM10	1500W	6.52A	£462.08
11m <sup>2</sup>	SPM11	1650W	7.17A	£490.41
12m <sup>2</sup>	SPM12	1800W	7.83A	£534.58
15m <sup>2</sup>	SPM15	2250W	9.78A	£672.08

\*Prices above **DO NOT** include a Warmup thermostat. (See pages 43 - 55 for details).

#### Price Guide for 200W/m<sup>2</sup> Underfloor Heating StickyMat

Area Heated	Heaters	Wattage	Amps	Price (Excl. 20% VAT)
0.5m <sup>2</sup>	2SPM0.5	100W	0.44A	£56.66
1m <sup>2</sup>	2SPM1	200W	0.87A	£95.41
1.5m <sup>2</sup>	2SPM1.5	300W	1.30A	£119.16
2m <sup>2</sup>	2SPM2	400W	1.74A	£132.91
2.5m <sup>2</sup>	2SPM2.5	500W	2.17A	£162.49
3m²	2SPM3	600W	2.61A	£190.83
3.5m <sup>2</sup>	2SPM3.5	700W	3.04A	£214.99
4m <sup>2</sup>	2SPM4	800W	3.48A	£238.33
4.5m <sup>2</sup>	2SPM4.5	900W	3.91A	£259.58
5m <sup>2</sup>	2SPM5	1000W	4.35A	£286.24
6m <sup>2</sup>	2SPM6	1200W	5.22A	£338.33
7m²	2SPM7	1400W	6.09A	£390.83
8m²	2SPM8	1600W	6.96A	£429.16
9m²	2SPM9	1800W	7.83A	£462.08
10m <sup>2</sup>	2SPM10	2000W	8.70A	£494.99
15m <sup>2</sup>	2SPM15	3000W	13.05A	£722.91

\*Prices above **DO NOT** include a Warmup thermostat. (See pages 43 - 55 for details).

The world's **best-selling** floor heating brand



igoplus

## Installation Guide

#### (Refer to installation manual for complete instructions)

Make a floor plan of your floor area by measuring your room and then subtract any fixtures (such as baths and cupboards). Ensure you have the correct size mat for your floor area.

#### Laying the Matting System

Roll out the mesh, wire face up. At the end of the run, cut the mat (not the wire), turn the mat through 90° or 180° and continue laying the mat. When the area is covered, adjust the mats until the loops are of equal distance apart. Affix the mat to the floor using its self-adhesive mesh, or using the double sided tape on the mat. Lay the temperature probe from the thermostat at equal distance between two of the cable loops and attach to the floor surface.

#### Connecting to the power supply

**NOTE:** All electrical connections must be performed by a certified electrician.

Install an RCD fused spur to power the thermostat and the matting system heating element network.

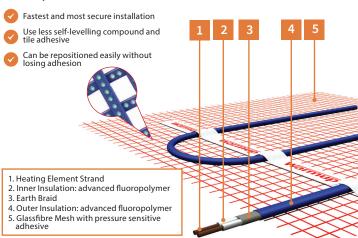
Take the unheated power supply cable from the end of the matting system, which should be positioned near the thermostat. Make sure all the connections have been made to the power supply. Turn the heater(s) on to ensure they are heating up (no more than 10 minutes).

#### Completing the job

 $\bigoplus$ 

Either lay a thin, self-levelling screed over the mat and leave it to dry before laying tiles or trowel a full bed of flexible tile adhesive directly over the mat and lay the floor tiles.

#### MAT: with pressure sensitive adhesive



Call us now 0345 345 2288 or visit www.warmup.co.uk

 $\bigoplus$ 

## **Frequently Asked Questions**

#### Can I use the Warmup® StickyMat System as a primary heat source?

If your room is well insulated and complies with modern insulation levels you should be able to use Warmup® as the sole heat source. However if your house is an older property with low insulation properties it is likely that an additional heat source may be required. Heat loss calculations can be carried out by a builder, architect or heating engineer.

#### What type of flooring can I use over the StickyMat System?

The StickyMat System is specifically designed for use under tiles and natural stone. For other floor finishes please see our full range of products on page 3. If you wish to use other floor coverings please contact our Technical Team on 0345 345 2288.

#### Can the StickyMat System be cut?

In order to fit the mat into a specific area, it may be necessary to cut and turn the glassfibre mesh. Care must be taken not to cut or damage the heating wire. The heating wire / heating mat cannot be shortened – the correct size heater must be installed on available floor space.

#### Can the floor probe / power supply cables be extended?

Both these wires can be extended up to 50 metres – please consult a qualified electrician for advice on extending the cable.

#### How long must I wait after installation before turning the system on?

The underfloor heating cannot be turned on until the flexible tile adhesive is fully dried. Please allow a minimum of 7 - 10 days. Turning the system on too early can force the flexible tile adhesive to dry too quickly, causing it to crack.



Installation video for Warmup® StickyMat System. Always refer to the installation manual prior to commencing your project.

The world's **best-selling** floor heating brand

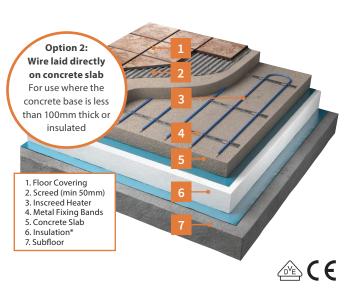
23



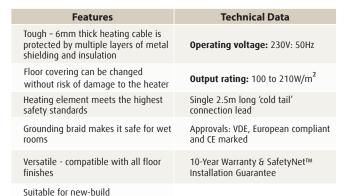
<del>( )</del>







<sup>\*</sup> Insulation must be either foil faced or concrete faced and suitable for use with electric underfloor heating



## **Price Guide**

Coverage at 100W/m²	Coverage at 150W/m²	Coverage at 210W/m²	Heaters	Heater Length	Wattage	Amps	Price (Excl. 20% VAT)
1.8m <sup>2</sup>	1.2m <sup>2</sup>	0.9m <sup>2</sup>	WIS180	9.0	180W	0.8A	£45.41
2.8m <sup>2</sup>	1.9m <sup>2</sup>	1.4m <sup>2</sup>	WIS280	14.0	280W	1.2A	£63.74
3.9m <sup>2</sup>	2.6m <sup>2</sup>	2.0m <sup>2</sup>	WIS390	19.5	390W	1.7A	£72.49
5.0m <sup>2</sup>	3.3m <sup>2</sup>	2.5m <sup>2</sup>	WIS500	25.0	500W	2.2A	£86.24
6.5m <sup>2</sup>	4.3m <sup>2</sup>	3.3m <sup>2</sup>	WIS650	32.5	650W	2.8A	£103.74
7.6m <sup>2</sup>	5.1m <sup>2</sup>	3.8m <sup>2</sup>	WIS760	38.0	760W	3.3A	£108.33
10.0m <sup>2</sup>	6.7m <sup>2</sup>	5.0m <sup>2</sup>	WIS1000	50.0	1000W	4.3A	£131.66
12.0m <sup>2</sup>	8.0m <sup>2</sup>	6.0m <sup>2</sup>	WIS1200	60.0	1200W	5.2A	£154.58
14.6m <sup>2</sup>	9.7m <sup>2</sup>	7.3m <sup>2</sup>	WIS1460	73.0	1460W	6.3A	£181.66
15.5m <sup>2</sup>	10.3m <sup>2</sup>	7.8m <sup>2</sup>	WIS1550	77.5	1550W	6.7A	£185.83
17.7m <sup>2</sup>	11.8m <sup>2</sup>	8.9m <sup>2</sup>	WIS1770	88.5	1770W	7.7A	£199.99
20.7m <sup>2</sup>	13.8m <sup>2</sup>	10.4m <sup>2</sup>	WIS2070	103.5	2070W	9.0A	£216.66
26.0m <sup>2</sup>	17.3m <sup>2</sup>	13.0m <sup>2</sup>	WIS2600	130.0	2600W	11.3A	£262.91
31.4m <sup>2</sup>	20.9m <sup>2</sup>	15.7m <sup>2</sup>	WIS3140	157.0	3140W	13.7A	£303.74
33.7m <sup>2</sup>	22.5m <sup>2</sup>	16.9m <sup>2</sup>	WIS3370	168.5	3370W	14.7A	£322.08

\*Prices above **DO NOT** include a Warmup thermostat. (See pages 43 - 55 for details).

Accessories	Price (Excl. 20% VAT)
Metal Fixing Bands - 25m	£42.91
Fixing Tape - 50m	£8.74

For more information about this product and installation videos scan the code.

Always refer to the installation manual prior to commencing your project.





## Installation Guide

#### (Refer to installation manual for complete instructions)

Draw up a floor plan to determine the placement of the thermostat, heating cable and the sensor probe.

#### Laying the Inscreed Cable System



The metal fixing strips should be laid out perpendicular to the heating element runs. Secure these fixing strips on the insulation or concrete floor using fixing nails or adhesive.

The fixing strips should be evenly spread across the floor at intervals of 0.75 meters and placed so as to leave a 100mm border all the way around the room.

The heating cables should then be laid up and down the room and clipped into the fixing strip. Please check the sizing guide at the back of the installation manual to determine the cable spacing. To ensure an evenly heated floor, the cables should be spaced evenly at all times.



- 1. Heating Element Strand
- 2. Inner Insulation: advanced fluoropolymer
- 3. Earth Braid

<del>( )</del>

- 4. Diameter 6mm
- 5. Outer Insulation: PVC

#### Connecting to the power supply

The heating cable cold tail should be connected to the thermostat by a certified electrician. The heating cables should be tested again **BEFORE** screeding.

#### Completing the job

Once laid, the heating cables must be covered with a minimum thickness of 50mm screed.

Install the Warmup thermostat and floor probe in one of the following ways:

- 1. Placed directly in the top 10mm of screed covering the heating wire
- 2. Placed into a channel cut out of the surface of the screed
- 3. Placed in a flexible conduit in the top 10mm of screed



## **Frequently Asked Questions**

#### Can the Inscreed Cable System be shortened?

Never shorten the Inscreed Cable. You must ensure that the correct size is installed into the area. We have a large range of sizes to choose from.

#### How thick is the screed used with the system?

The Warmup® Inscreed Cable is designed to be placed within a screed of at least 50mm in thickness. The exact floor build up depends on the insulation materials in the subfloor - please see the installation manual for full details.

#### Can the Inscreed Cable System be laid directly onto insulation material? (i.e. single pour)

Yes, if you use cement-faced or foil-faced insulation boards suitable for electric underfloor heating such as the Warmup Insulation Boards.

#### When can I turn my heating on?

The heating should not be activated until the screed has fully cured (approximately 7 - 28 days).

#### Where should I place the floor probe?

The floor probe should be located at the surface of the screed layer below the floor covering (top 10mm of screed). It can also be cemented into a channel cut out of the surface of the screed.









# Warmup<sup>®</sup> Foil Heater System

The Warmup® Foil Heater is a streamlined electric radiant floor heater designed for use with carpet, vinyl, wood and other floating floors. We recommend using the Warmup Insulated Underlay and Dual Overlay Systems (See pages 32 - 35) for maximum efficiency.\* Warmup has successfully completed controlled tests with Amtico and Karndean flooring.





<del>( )</del>

Installed directly under floor finish; no self-levelling required

Fully earthed flat aluminium foil will not raise floor levels

Wire based system can be adapted to fit around objects

Great for heating under floating floors such as laminate and hardwood



SAFETY Net

#### **Technical Data**

Construction: Wire with advanced fluoropolymer insulation, encased in aluminium foil

Operating voltage: 230V: 50Hz

Output rating: 140W/m<sup>2</sup>

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

NOTE: MUST be used with the Warmup Insulated Underlay (See pages 36 - 37). NOTE: Must be used with Warmup Dual Overlay (See pages 38 - 39) when laying vinyl or carpet. NOTE: Always check compatibility of flooring with electric underfloor heating.

Call us now 0345 345 2288 or visit www.warmup.co.uk



28

## **Price Guide**

Area Heated	Heaters	Wattage	Amps	Price (Excl. 20% VAT)
1	WLFH-140W/140	140W	0.61A	£63.74
1.5	WLFH-140W/210	210W	0.91A	£76.66
2	WLFH-140W/280	280W	1.22A	£96.24
3	WLFH-140W/420	420W	1.83A	£144.99
4	WLFH-140W/560	560W	2.43A	£181.66
5	WLFH-140W/700	700W	3.04A	£222.49
6	WLFH-140W/840	840W	3.65A	£262.91
7	WLFH-140W/980	980W	4.26A	£303.74
8	WLFH-140W/1120	1120W	4.87A	£344.99
9	WLFH-140W/1260	1260W	5.48A	£390.41
10	WLFH-140W/1400	1400W	6.09A	£431.24
12	WLFH-140W/1680	1680W	7.30A	£516.66

<sup>\*</sup> Prices above **DO NOT** include a Warmup thermostat. (See pages 43 - 55 for details). MUST be used with the Warmup Insulated Underlay (See pages 36 - 37). If you are laying a vinyl or carpet (excludes bathrooms) the Warmup Dual Overlay MUST be used (See pages 38 - 39). A maximum of 25m<sup>2</sup> of heating can be used with one thermostat.

For more information about this product and Installation videos scan the code.

Always refer to the installation manual prior to commencing your project.



## Installation Guide

<del>( )</del>

#### (Refer to installation manual for complete instructions)

Warmup's foil heating mats are available in several convenient sizes. Use larger mats as much as possible and smaller mats as gap fillers. Ideally, the combination should cover 80% of your floor area. Exclude permanent or static fixtures from your calculations.

#### Laying the Foil Heater System

Lay the heating mats on top of the insulation, leaving a gap of around 50mm from the wall to the heating mats and a gap of about 10mm between each mat. Stretch and secure the mats to the floor with the aluminium tape provided. Additional duct tape can be used where required.

Place the mat's electrical supply cables towards the junction box, ensuring they do not cross each other. Create a slight groove in the insulation under the joint to ensure that the heating mat lays flat.



#### Connecting to the power supply

**NOTE:** All electrical connections must be performed by a certified electrician.

#### Completing the job

Create a groove in the subfloor to accommodate the floor probe. Connect the floor temperature sensor to the thermostat through a conduit and install between two heating wire runs on the mat. The probe wire must **NEVER** touch or be crossed by the heating element.

## **Frequently Asked Questions**

#### What types of flooring can be used?

The Foil Heaters can be used under carpet, vinyl, wood or floating floorings provided they are no thicker than 18mm and can withstand up to 27°C of heat. Check with the manufacturer to ensure it is suitable for use with electric underfloor heating.

#### Can the Foil Heaters be cut and turned?

You can cut and turn the foil casing to suit the shape of the room, but NEVER cut the wire. Once the aluminium foil has been cut and the mat has been re-positioned, use the aluminium foil tape provided to cover any exposed wire and link the two pieces of the mat. Please see the installation manual for full details and diagrams.



#### When can I turn my Foil System on?

Once the finished floor has been laid, wired up and tested, the system can be switched on immediately.

#### Which insulation materials should be used?

We recommend Warmup's own brand Insulation Underlay be used with Warmup® Foil Heaters. If you are installing a soft flooring such as vinyl or carpet, use the Warmup Dual Overlay to protect the foil heating wire from heels and heavy load points.



- 2. Multi-strand twin conductors heating element
- 3. Aluminium Foil Earth

Call us now 0345 345 2288 or visit www.warmup.co.uk

Œ





## **Cement Coated Tough Insulation Boards**

Insulate and waterproof in one easy step with Warmup<sup>®</sup> Insulation Boards. Made from extruded polystyrene and faced with 0.5mm glassfibre mesh reinforced polymer-modified cement mortar, they have a high thermal insulation property for energy efficiency and an added benefit of sound proofing. The boards 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 kitchens.



Insulation boards prevent heat loss to the subfloor - a warm floor can be achieved in as little as 20 minutes compared to over 2 hours with no insulation (see the heat-up chart on page 34 for more details).



Features	Technical Data
Easy to cut and shape around fixtures with a knife or saw	Board size: 1,250mm(L) x 600mm(W)
Comes in a range of thicknesses to suit floor and wall applications. Can be fixed to solid or stud walls	<b>Thickness:</b> 6mm, 10mm, 20mm, 30mm, 40mm, 50mm
Holds wall tiles up to 62kg/m² and floor tiles up to 30 tonnes/m²	Composition: Extruded polystyrene, each side faced with a nominal 0.5mm thick glassfibre mesh reinforced polymer-modified cement mortar
Joints must be sealed to make them waterproof	<b>R Value:</b> (6mm) 0.16; (10mm) 0.28; (20mm) 0.58; (30mm) 0.88; (40mm) 1.20; (50mm) 1.50
High thermal insulation, resisting heat loss and increasing the heating system's efficiency	Class "0" / "B1" fire rated
Impact sound reduction dl <sub>W</sub> =21	No primer required when used in conjunction with underfloor heating
Ready for tile/plaster – <b>no</b> additional prep work needed	European compliant and CE marked
Excellent as internal wall insulation especially when compared to standard cement building boards and plaster boards	Conforms to Building Regulations Part L



## **Price Guide**

Area	No. of	Price (Excl. 20% VAT)					
Heated	Boards req	6mm	10mm*	20mm	30mm	40mm	50mm
1	2	£35.82	£35.82	£49.16	£60.82	£69.98	£87.48
2	3	£53.73	£53.73	£73.74	£91.23	£104.97	£131.22
3	5	£89.54	£89.54	£122.90	£152.05	£174.95	£218.70
4	6	£107.45	£107.45	£147.48	£182.46	£209.94	£262.44
5	7	£125.36	£125.36	£172.06	£212.87	£244.93	£306.18
6	9	£161.18	£161.18	£221.22	£273.69	£314.91	£393.66
7	10	£179.08	£179.08	£245.80	£304.10	£349.90	£437.40
8	11	£196.99	£196.99	£270.38	£334.51	£384.89	£481.14
9	13	£232.81	£232.81	£319.54	£395.33	£454.87	£568.62
10	14	£250.72	£250.72	£344.12	£425.74	£489.86	£612.36
11	15	£268.63	£268.63	£368.70	£456.15	£524.85	£656.10
12	17	£304.44	£304.44	£417.86	£516.97	£594.83	£743.58
13	18	£322.35	£322.35	£442.44	£547.38	£629.82	£787.32
14	20	£358.17	£358.17	£491.60	£608.20	£699.80	£874.80
15	21	£376.08	£376.08	£516.18	£638.61	£734.79	£918.54
16	22	£393.98	£393.98	£540.76	£669.02	£769.78	£962.28
17	24	£429.80	£429.80	£589.92	£729.84	£839.76	£1,049.76
18	25	£447.71	£447.71	£614.50	£760.25	£874.75	£1,093.50
19	26	£465.62	£465.62	£639.08	£790.66	£909.74	£1,137.24
20	28	£501.43	£501.43	£688.24	£851.48	£979.72	£1,224.72

\*Standard board thickness = 10mm

Accessories	Items Required	Price (Excl. 20% VAT)
Glassfibre tape - prevents movement and covers the joints between boards	One roll per 25 boards	£3.74
WIBS40MM Wooden Screws - 40mm	100 per pack to fix approximately 5 boards	£3.33
WIBW36MM Penny Washers - 36mm diameter	50 per pack to fix approximately 2 boards	£5.41

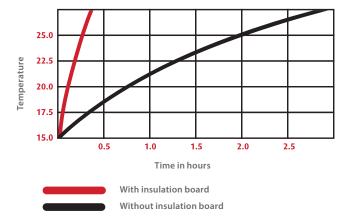


Installation video for Warmup® Insulation Boards. Always refer to the installation manual prior to commencing your project.

The world's **best-selling** floor heating brand

**(** 

## **Heat-Up Chart**



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.

## Installation Guide

<del>( )</del>

(Refer to installation manual for complete instructions)

#### Installation onto concrete floors

Lay the boards on a concrete base and stagger the joints. Fix the boards to the concrete base with a suitable flexible tile adhesive. Once the adhesive hardens, tape the joints with glassfibre tape.

Installation onto wooden floors (Contact us on 0345 345 2288 to receive a copy of our technical guide for wood flooring or visit www.warmup.co.uk).

On a wooden subfloor, lay the boards and stagger the joints. Fix with a suitable flexible tile adhesive. When the adhesive has set but not necessarily dried, fix the boards with a screw fixing and washer at 200mm spacings. Ensure the screw head is flush with the surface. Reinforce the joints with glassfibre tape.

#### Installation onto walls

Fix the lightweight boards to any suitable framework, such as wood or brick. They are strong, holding a tile weight of 62kg/m<sup>2</sup> (double that of plasterboard). Boards can easily be cut with a knife or sawed, to work around objects. Use 8 galvanised screws per m<sup>2</sup> at a minimum of 30mm from edges. Tighten screws until washers bite the board surface, then level the washer with a rubber mallet. Cover joints with self adhesive glassfibre tape embedded in a layer of flexible tile adhesive.

 $\bigoplus$ 

<sup>\*</sup> Assumes a system running twice a day for 2 hours on a concrete subfloor

<sup>\*\*</sup> Source: Warmup tests performed to EN442-2 standards

## **Frequently Asked Questions**

#### Where can I use it?

**Floors:** Warmup® Insulation Boards can be used as a structural tile backer board on the floor, withstanding a load of 30 tonnes/sqm and are ideal for use with underfloor heating. We recommend a minimum thickness of 6mm on a concrete subfloor and 10mm on a wooden subfloor for floor stability. They offer the added benefit of high sound proofing properties, which is ideal for rooms above ground level.

 $\bigoplus$ 

**Walls:** As wall tile backer boards, tiles can be fixed directly onto the surface without prior preparation. When the joints are sealed it is totally waterproof, offering an ideal solution for use in bathrooms, shower rooms, wetrooms and kitchens.

#### What is it made from?

Warmup® Insulation Boards are made of waterproof extruded polystyrene and have a glassfibre mesh embedded on each face, onto a cement polymer adhesive. The boards are fully waterproof, preventing any water to pass through them in the way expanded polystyrene boards do. They are lightweight, easy to cut with a knife and install onto any surface. Being free of harmful asbestos, they pose no health or safety risks and are unaffected by the freeze/thaw cycle.

#### What is an R Value?

The R value is a measure of thermal resistance used in the construction industry. The higher the R value the better an insulator (e.g. 10mm Warmup® Insulation Boards have an R value of 0.28 m²K/W and the 20mm Warmup® Insulation Boards have an R value of 0.58 m²K/W). All buildings should strive for the highest possible R values to reduce the amount of energy used.

# Why do you recommend insulation boards on a concrete base?

Insulation boards can reduce running costs by as much as 50% because they are a highly efficient thermal barrier to cold rising from the subfloor. By reflecting the heat upwards into the floor instead of losing heat to the subfloor, the floor will be warm in approximately 20 minutes after the system comes on. Without insulation boards it could take several hours. This is important for energy efficiency for today's energy-conscious consumers. See the heat up chart example on page 12 for more details.



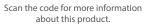


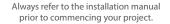


## Warmup® Insulated Underlay

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, reflecting heat upwards, making the heating system even more efficient. The foil backing acts as a moisture barrier.









Features	Technical Data
Resists heat loss and increases the heating systems efficiency	<b>Roll Size:</b> 1200mm (W); 2.5sqm, 5sqm, 10sqm and 25sqm
Extremely effective for reducing contact noise	<b>Thickness:</b> 6mm
Very thin at only 6mm in depth	Composition: Top Layer: Grooved polystyrene Bottom layer: Silver foil with adhesive overlap
Lightweight and easy to install	<b>R Value:</b> 0.19 m <sup>2</sup> K/W
Foil backing acts as a moisture barrier	Contact sound reduction: 25dB \( \Delta \text{Lw} \) when used in conjunction with the Warmup Dual Overlay System.

Recommended for use with the Warmup®Dual Overlay System

Call us now 0345 345 2288 or visit www.warmup.co.uk



<del>( )</del>

Area Covered	Insulated Underlay System Code	Price (Excl. 20% VAT)
2.5m <sup>2</sup>	WIU2.5	£26.24
5.0m <sup>2</sup>	WIU5.0	£49.58
10.0m <sup>2</sup>	WIU10.0	£96.24
25.0m <sup>2</sup>	WIU25.0	£227.08

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.

# Installation Guide

# (Refer to installation manual for complete instructions)

Install the Insulation Underlay with the silver foil facing down onto a clean and dry floor. After fitting the first row, roll the next section of underlay. Remove the protective film from the self-adhesive overlap and stick both rows together, creating a damp proof barrier. Stagger subsequent rows until the whole floor area is covered.

# **Frequently Asked Questions**

# What is it made from?

<del>( )</del>

The top layer of the underlay is comprised of a 6mm grooved lightweight polystyrene (which offers added acoustic properties by reducing contact noise) and a bottom layer of silver foil which has an adhesive overlap to join subsequent rolls. The underlay has a sound reduction of 25dB  $\Delta\text{Lw}$  when used in conjunction with Warmup® Dual Overlay (See pages 38 - 39). 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.

### What is an R Value?

The R value is a measure of thermal resistance used in the construction industry. A rating of 0.19 represents a low level of insulation for energy efficiency.

# Can I use this under tiles and stone?

No. It is designed for installation with the Foil Heater when installed under soft and resilient floor coverings such as wood, carpet, vinyl and linoleum. When your finish needs to be fixed down (glued) such as carpet, then a combination of the Insulated Underlay, Foil Heater and Dual Overlay should be used. Warmup's Insulated Underlay has been specially developed as part of a complete stable overlay system with the Dual Overlay to protect the heating wire from sharp heels and heavy point loads. The combined thickness of the Warmup® Dual Overlay and the Warmup Insulated Underlay is 13mm.







# Marmup° Dual Overlay

Warmup® Dual Overlay is a free-floating subfloor, offering a smooth and seamless finish for carpet, vinyl and linoleum. The two layers protect the heating wire from sharp or heavy point loads and provide even heat distribution. Installation is dry, clean and quick. The Insulated Underlay and Dual Overlay are designed to work together with Warmup Foil Heaters (See pages 28 - 30).

- 1. Floor Covering
- 2. Warmup® Dual Overlay-Top 3. Warmup® Dual Overlay-Base Board
- 4. Warmup® Foil Heater
- 5. Warmup<sup>®</sup> Insulated Underlay
- 6 Subfloor

<del>( ( )</del>





Consists of a base board (3mm deep) and top board (4mm deep) with a contact adhesive to bond them together

Provides a stable subfloor on which a variety of floor coverings can be laid

Very thin at only 7mm in depth

Protects electric heating wire from damage if flooring is not laid immediately

Installation is quick, easy and dry - no need for self-levelling

Provides even heat distribution

NOTE: Always check compatibility of flooring with electric underfloor heating.

# **Technical Data**

4 base and 4 top boards (covers 2.88m<sup>2</sup>)

# 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/cm<sup>2</sup>: >40

Humidity (%): 4-10

Thermal R value (m<sup>2</sup>K/W): 0.047

Fire Class, DIN4102: B2



Price (Excl. 20% VAT)

WDO - Dual Overlay System (covers 2.88m2)

£72.49/pk

Scan the code for more information. about this product.

Always refer to the installation manual prior to commencing your project.



# Installation Guide

# (Refer to installation manual for complete instructions)

The Warmup® Dual Overlay is comprised of a 3mm deep base board and 4mm deep top board. The bottom and top layers are laid out with staggered joints and arranged so that the top boards overlap the joints in the base boards. The Warmup® Foil Heating System lays between the Underlay and Dual Overlay System. This method of installation provides a stable surface for the floor finish to rest on and avoid any joints showing through the final floor finish. Finally, the floor finish can either be glued to the boards as a final layer or simply laid freely upon them.

# **Frequently Asked Questions**

# Is the Dual Overlay fixed to the subfloor?

The Warmup® Dual Overlay is a floating subfloor - it is not fixed to the floor below. It is comprised of a 3mm deep base board and a 4mm deep top board. Both boards have contact adhesive, bonding them together to make one solid subfloor, to which a variety of floor coverings may be fixed. It provides a smooth and seamless subfloor making it suitable for soft and resilient floor coverings such as carpet, vinyl and linoleum. The combined thickness of the Underlay and Dual Overlay is 13mm.

### How is it sold?

<del>( )</del>

Each pack contains: 4 base boards & 4 top boards and covers 2.88m<sup>2</sup> of flooring.

# Can I use other Warmup Heaters with the Underlay/ Dual Overlay?

The Warmup Underlay / Dual Overlay systems are designed to work specifically with Warmup Foil Heaters only.

# Please Note:

\* Cannot be used in wet areas such as bathrooms.

\*\*It is strongly recommended to dry clean carpet flooring laid on Dual Overlay. Do not steam clean, as this can cause moisture to get into the wood and joints and show through the flooring over time.

The world's **best-selling** floor heating brand





# 150W & 200W/m<sup>2</sup> **In-Wall Heating Panel**

In-Wall Heating Panels are perfect if you wish to extend the luxury of the floor heating to the walls, ideal if you wish to heat a small area of the wall or for whole room heating; this is particularly suitable in dwellings where heat loss and poor insulation is an issue.

The In-Wall Heater Panels, suitable for use behind tiles or natural stone are available in two wattages, 150W/m<sup>2</sup> & 200W/m<sup>2</sup>, offering you a choice to add additional heat with the 200W/m<sup>2</sup> which is particularly suitable for high heat loss rooms.

For more information on the application of the In-Wall Heater Panels or to receive a quotation please contact our Projects Division on 0345 345 2288 or visit our website www.warmup.co.uk



### **Features Technical Data** The thinnest dual-fluoropolymer coated Operating Voltage: 230V: 50Hz heating wire (less than 1.8mm diameter) Toughest wire - multi-strand core, double-insulated using advanced Width: 500mm (0.5 metre)

Sturdy glassfibre mesh for extra durability.

fluoropolymers (ECTFE).

High quality double-sided tape, for easier installation.

IP Rating: IPX7

**Output Rating:** 150W/m<sup>2</sup> and 200W/m<sup>2</sup>

Protection Class: |

CE Marked

Lifetime Warranty and SafetyNet™ Installation Guarantee



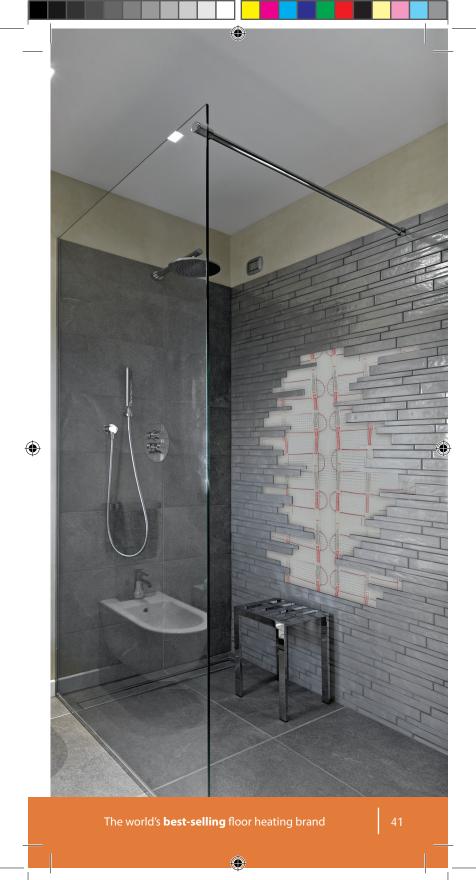


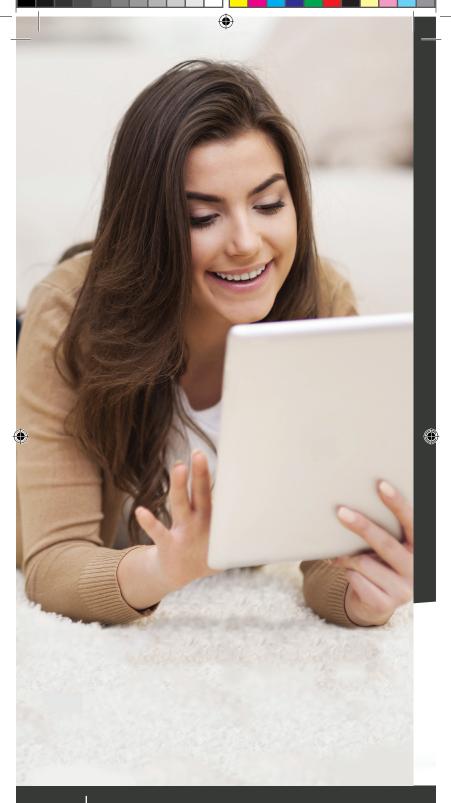
Scan the code for more information about this product.



Always refer to the installation manual prior to commencing your project.







Call us now 0345 345 2288 or visit www.warmup.co.uk

# Warmup Smart.

# **Our Philosophy**

Warmup Smart is passionate about creating products that work simply and beautifully, whilst improving the efficiency and comfort of your home. We believe that your home is where you feel safe, relaxed and comfortable; the place you go to disconnect from all the distractions of day-to-day life. Our work is built on these foundations.

Our goal is to improve home-life.

With Warmup Smart, managing your heating system has never been so easy. Our smart products save you energy and money, on average £378 per year for a typical UK home. They eliminate the necessity to manage your system, without any effort on your behalf, giving you one less thing to worry about and allowing you to focus on the things that matter, like family, friends and stress-free time.



# SmartGeo™

Always at the right temperature automatically, and up to 25% lower energy usage. Just like magic



# EasySwitch™

Always on the best tariff, automatically. Saving on average £210



### Easy to use

Simple and secure set up using WiFi, with support

# The Result

Perfect central heating control from Warmup 4iE +Kit, saving on average £378 per year.



The world's **best-selling** floor heating brand



# 4 i E SMART WIFI THERMOSTAT

For central and underfloor heating



# The right temperature. The best tariff. Effortlessly.

# High-quality design and engineering

<del>( )</del>

Premium design, personalised for you.

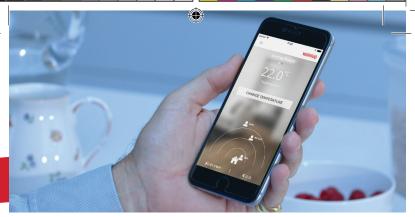
The 4iE® is designed to look great in both modern and traditionally styled homes, with high-gloss effect front faces and bevelled chrome edges to reflect wall colours.

A range of vinyl Overlays are available in bold colours and textured metal and wood effects. You can even use a custom photo to complement your wallpaper.

The large colour touchscreen can be customised with different themes and uploadable photo backgrounds. There's even a 7-day local weather forecast, and traffic alerts built in.



Call us now 0345 345 2288 or visit www.warmup.co.uk





# Always at the right temperature, home or away

The 4iE<sup>®</sup> does not require programming, using SmartGeo<sup>™</sup> it works with your smartphone to ensure your home is always at the temperature you want just as you arrive, and using more efficient temperatures when you're away.

If you want to use a conventional program or just want to make a quick change, the MyHeating™ app is simple and easy to use.



# The most efficient settings for your home

The 4iE® learns how you use your heating and the unique way your home responds to changes in temperature to calculate more efficient settings.



 $\bigoplus$ 

# Automatically on the best energy tariff, year after year

Using EasySwitch™ the 4iE® can find you lower energy tariffs and automatically switch to the best deal. According to the Department of Energy & Climate Change, switching energy tariff can save on average £330 (Source: CMA, June 2016).

You can choose to let the 4iE® switch for you automatically when a better deal is available or see the results and easily switch yourself.

# Natural Language Programming™

Programming that speaks your language.

If you don't want to use SmartGeo™ or just want to make a quick adjustment, Natural Language Programming™ is simple to use. It uses familiar terms and phrases to understand the requirements for your heating program, for example 'What time do you wake up?'



\*Upgrade for just £29.99 inc. VAT at www.warmup.co.uk

The world's **best-selling** floor heating brand



# Easy to install and set up



- Two piece design and wireless software updates to reduce call-backs
- Easy to setup WiFi
- Free installer training classes
- Self guiding screw terminals prevent driver skipping

The 4iE® uses a standard 35mm deep back box to house connections behind its stylish facia. It is installed just like a traditional three-wire thermostat and therefore easily replaces existing controls - including covering fixing holes from old thermostats without the need for additional plates.

# **Technical Data**

Dimensions: (H/W/D): 90 x 120 x 18mm (from wall)

Sensors: Air and floor/ambient Installation depth: 35mm back box

IP rating: IP33

<del>( ( )</del>

3-Year Warranty with option to upgrade to Lifetime Warranty

Approvals: BEAB

CE Marked and European compliant

Sensor Type: NTC 10K 3m Long (can be extended to 50m)

Compatibility: Ideal for Electric and Hydronic underfloor heating up to 16A.

Combi and System boilers with switch live (230VAC) input

Er-P Class: IV

Code	Description	Price (Excl. 20% VAT)
4iE OB	Onyx Black Smart WiFi Thermostat	£166.66
4iE BP	Bright Porcelain Smart WiFi Thermostat	£166.66

Call us now 0345 345 2288 or visit www.warmup.co.uk



# **Frequently Asked Questions**

# How do I connect the 4iE® to my internet?

The 4iE® connects to WiFi just like a smartphone or laptop. Simply find your WiFi network in the 4iE menu and enter your password using the onscreen keyboard.

Once connected you need to create your MyHeating account. Go to my.warmup.com and register. From there you can add the 4iE to your account using the unique code displayed on the 4iE.

# Which heating systems can the 4iE® control?

The 4iE® can control Warmup's electric and hydronic underfloor heating as well as central heating (combi and system boilers). Central heating and hydronic underfloor heating systems are controlled using a 'switch live' wire.

Warmup recommends that you check with your heating system manufacturer or installer to find out if your system can be controlled by a 'switch live' wire. The 4iE should always be installed by a certified professional.

### **Data Protection**

<del>( )</del>

MyHeating™ uses the same web security as online banking and each communication between your 4iE and MyHeating is protected using the same encryption the intelligence services use for classified documents.

Warmup backs-up and stores all data safely encrypted to protect it, with firewalls and electronic surveillance in place.

To ensure your system is safe, Warmup recommends your WiFi network is password protected and you do not share your log-in details with anyone. Warmup will never ask you for your password.



View the installation video for the Warmup 4iE® Smart WiFi Thermostat Always refer to the installation manual prior to commencing your project.

The world's **best-selling** floor heating brand

47



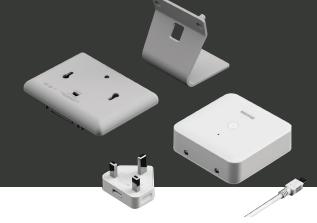
 $\bigoplus$ 

# Now you can use the Innovative 4iE® with your Central Heating **System**

NEW!

The Warmup +Kit works with the 4iE (sold separately) to bring the energy and money saving features of the 4iE and free Warmup MyHeating App  $\overline{\mathbf{w}}$  to your entire central heating system.

The included receiver unit is simply connected to your boiler and communicates wirelessly with the 4iE which can be placed anywhere in the home on the included stand.



Features	Technical Data	
	Boiler Receiver	Stand
Wireless control of boiler	<b>Dimensions:</b> 86 x 86 x 26.5mm	Oimensions (Assembled with 4iE face): 120 x 121.4 x 63.3mm
Works with most heating systems	IP Rating: IP40	IP Rating: IP30
	Electrical rating: Max 230VAC @3A	<b>Guarantee:</b> 3 years
Wall or stand mounted	<b>Guarantee:</b> 3 years	DE Eroguopey
	<b>RF Frequency:</b> 868MHz	<b>RF Frequency:</b> 868MHz

Call us now 0345 345 2288 or visit www.warmup.co.uk



 $\bigoplus$ 

 $\bigcirc$ 

Code	Description	Price (Excl. 20% VAT)
4iE Plus Kit	Warmup +Kit (for use with Warmup 4iE)	£70.83

# Compatibility

For use with the 4iE Smart WiFi Thermostat (sold separately). Compatible with hydronic underfloor heating systems up to 3A. Compatible with Combi and System boilers with 230VAC, volt-free or low voltage input up to 3A.

# Wireless control of boiler

The +Kit uses reliable wireless technology to control your boiler through walls and between multiple floors.

# Works with most heating systems

The +Kit works with 230V heating systems and volt-free or low voltage systems up to 3A. Simply wire the receiver unit using the wiring diagrams in the manual provided.

# Wall or stand mounted

The 4iE can be mounted on the included stand for easy placement, or mounted on the wall to replace an existing thermostat.

### What's in the box?

<del>( ( )</del>

Boiler receiver, power base stand, power adapter with 1m USB cable, adhesive feet, operating and installation manual, mounting screws and reset pin.



The world's **best-selling** floor heating brand

49



 $\bigoplus$ 

# Warmup 3iE® Energy-Monitor Thermostat

Designed by Warmup®, the unique and exclusive 3iE<sup>®</sup> Energy-Monitor Thermostat was the first programmable thermostat to come with Active Energy Management™ prompting users to save up to 10% on energy bills.





# **Features**

<del>( )</del>

Active Energy Management prompts users to save up to 10% on utility bills

Easy-to-use interface eliminates complicated manuals

Unrivalled accurate floor temperature control of +/- 0.5°C, significantly reduces energy wastage

10 programmable periods per day for efficient energy use

Designed and available exclusively from Warmup

Graphs show exact heating costs for underfloor heating

Stylish colours to suit any decor



\*Upgrade for just £24.99 inc. VAT at www.warmup.co.uk

### **Technical Data**

Output relay: 16A, 3,600W

Temperature range: 0 / +50 °C

Programming function: 10 events and 10 temperatures / day

Sensors: Floor/Air

Sensor Type: NTC 10K 3m Long (can be extended to 50m)

Dimensions: (H/W/D):

90mm x 113mm x 19mm (flush fit)

Size of display: 2.4" Installation depth: 30mm

IP rating: IP20/IP32 (with optional

gasket)

Approvals: BEAB

European compliant and CE marked

3-Year Warranty with option to upgrade to Lifetime Warranty

Er-P Class: IV

Call us now 0345 345 2288 or visit www.warmup.co.uk

Code	Description	Price (Excl. 20% VAT)
3iE PB	Piano Black Programmable Thermostat	£126.66
3iE CC	Classic Cream Programmable Thermostat	£126.66
3iE SG	Silver Grey Programmable Thermostat	£136.24
3iE LG	Leaf Green Programmable Thermostat	£136.24
3iE MB	Madison Blue Programmable Thermostat	£136.24
3iE DP	Deep Pink Programmable Thermostat	£136.24
3iE WB	Warm Berry Programmable Thermostat	£136.24

The world's first fully interactive, touch technology, energy-monitor thermostat features an easy-to-use interface, eliminating complicated instruction manuals. The display shows recorded energy consumption usage, so that users know the exact underfloor heating costs. Up to 10 programmable periods can be set each day to maximise energy efficiency.

### **Innovative**

First thermostat with a 2.4" full colour screen and integrated touch technology - patents pending.

Beautifully crafted fashion colour fascias with chrome edging are perfectly in tune with the modern home environment.

### Interactive <del>( ( )</del>

Clear graphical display makes any adjustment quick and easy.

Choose the display style that suits you best - wide choice of screen themes.



Installation video for Warmup 3iE energy-monitor thermostat. Always refer to the installation manual prior to commencing your project.

The world's **best-selling** floor heating brand



# Intelligent

Proportional Adaptive Function ensures the room does not over-heat, reducing wasted energy whilst also protecting the components inside. The Early Start algorithm learns how long it takes to warm the room and activates the heating so it's up to temperature at the right time.

 $\bigoplus$ 



# **Energy Efficient**

Unrivalled accurate floor temperature control means no wasted energy - reducing the costs associated with over-heating.

Graphical energy monitor shows exactly how much energy is being used and when.



Active Energy Management prompts you to choose the best and most efficient temperature for each room, maximising energy efficiency.



# Installation

The 3iE® Energy-Monitor Thermostat should be installed by a certified electrician only, using Warmup's installation instructions.

52 Call us now 0345 345 2288 or visit www.warmup.co.uk



 $\bigcirc$ 

# **Frequently Asked Questions**

# What is Active Energy Management?

The 3iE® Energy-Monitor Thermostat has a unique feature called Active Energy Management. It displays graphs of the users recorded energy consumption. By following the on-screen prompts, users can save up to 10% on utility bills by choosing the best and most efficient temperature for each room.

 $\bigoplus$ 

# How many sensor settings does the 3iE have?

Warmup's 3iE<sup>®</sup> offers a choice of three sensor settings: air, external and floor.

This provides unrivalled accurate floor temperature control to maximise energy efficiency.

# Can more than one heater be controlled via the same thermostat?

Yes. Each thermostat can take up to 16 amps - please note that the heaters should be wired in parallel only at the thermostat or junction box. A maximum of two heaters can be wired directly into the back of the thermostat. If more than two heaters are used (combined load of less than 16 amps) they must be wired into a junction box, which connects to the thermostat.

For more than 16 amps a contactor and an RC unit are used in the circuit. Please consult a certified electrician or Warmup's Technical Team on: 0345 345 2288 for advice on this type of installation.





The world's **best-selling** floor heating brand



# Tempo Digital Thermostat

The Tempo thermostat enables end users to choose the time as easily as they would with a watch or clock and quickly set their programs heat on when they want it and off when they don't need it.







BEAB

Porcelain White



<del>( )</del>

# **Features**

Stylish and contemporary design Clear screen displaying program details

Easy control with dial and sliders

Suitable with all Warmup electric and hydronic underfloor heating systems

Available in Porcelain White and Piano Black

Perfect for the whole house with the exception of the bathroom



\*Visit www.warmup.co.uk for more details

# Also available



MSTAT Manual Thermostat

Suitable with Warmup's electric underfloor heating systems only

# **Technical Data**

Input voltage: 230V +/- 15% at 50Hz

Max output: 16A

Dimensions: (H/W/D): 90 x 113 x 23mm (flush fit)

Screen size: 45 x 50mm

Sensors: Floor/Air

Sensor Type: NTC 10K 3m Long (can

be extended to 50m)

**Programming:** 7-day, 1 day, 5/2 day

Battery backup: 3 months (CR2032

battery provided)

IP rating: IP20 Approvals: BEAB

European compliant and CE marked

3-Year Warranty with option to

upgrade to Lifetime Warranty

Er-P Class: IV



RCD/Fused Spur Residual Current Device Fused Spur

Call us now 0345 345 2288 or visit www.warmup.co.uk



Programmable Thermostat	Price (Excl. 20% VAT)
Tempo - Piano Black Programmable Thermostat	£87.49
Tempo - Porcelain White Programmable Thermostat	£87.49

Manual Thermostats	Price (Excl. 20% VAT)
MSTAT - White Manual Thermostat	£60.83

Accessories	Price (Excl. 20% VAT)
RCD/Fused Spur - 30mA Residual Current	f43.74
Device	143.74

# Tempo in each zone provides the following:

- **BETTER** easy-to-use interface and intuitive design
- FASTER set-up takes just minutes to get right the first time
- **SMARTER** control of energy costs

With Tempo, end users can simply program their settings to suit individual requirements, warmer when they are at home, lower when they are away or asleep.

It will help avoid wasting energy and achieve savings on utility bills.

Its Proportional Adaptive Function ensures the room does not over-heat, reducing wasted energy whilst also protecting the components inside. The Early Start algorithm learns how long it takes to warm the room and activates the heating so it's up to temperature at the right time.

# **Frequently Asked Questions**

# What is the difference between Tempo and the 3iE® Energy-Monitor Thermostat?

The main difference is the 3iE's energy-monitoring function. The monitor tracks your exact usage and based on your fuel rates, displays your underfloor heating costs. Through the Active Energy Management, it gives users suggestions to lower usage and fuel costs without sacrificing comfort.

# How does it work?

The sliding lever on the right-hand side takes you through the four easy program steps to set the day, time and heat periods you desire. Turn the dial to increase or decrease the settings and then press to secure that setting. The sliding lever at the bottom allows you to select between manual, automatic, frost-protection or off modes.

The world's best-selling floor heating brand

55



 $\bigoplus$ 



# Mirror Demisters

Mirrors are revealing while they brighten the most ordinary bathroom. However, steamed up bathroom mirrors can present a challenge to homeowners. Not any longer, thanks to Warmup® Mirror Demisters - a safe and easy way to remove steam from bathroom mirrors.





# **Features**

Flat film does not take up space

Self-adhesive for convenient installation directly onto the back of the mirror

Resistant to moisture, vibration, shock, dust and ageing

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 large mirrors

# **Technical Data**

# **IP57 Rated**

Suitable for zones 1 & 2 according to BS7671

Operating voltage: 230V: 50Hz

1m cold tail

Double insulated

No transformers or thermostats necessary

European compliant and CE marked 1-Year Warranty



Call us now 0345 345 2288 or visit www.warmup.co.uk



Size & Description	Wattage	Price (Excl. 20% VAT)
WMD1 - 400mm x 450mm	18W	£49.58
WMD2 - 600mm circular	55W	£67.91
WMD3 - 290mm x 290mm	27W	£36.66
WMD4 - 600mm x 1100mm	132W	£94.99

# Installation Guide

# (Refer to installation manual for complete instructions)

The Mirror Demisters are self-adhesive and must be mounted directly onto the reverse side of the mirror or onto a sound surface which is in direct contact with the mirror. No other adhesives should be used.

The Mirror Demisters should be connected by a certified electrician.

Scan the code for more information about this product.

Always refer to the installation manual prior to commencing your project.





 $\bigoplus$ 

# **Frequently Asked Questions**

# Do the Mirror Demisters come in different sizes?

The Mirror Demisters come in round, square and rectangular sizes. Installation is as simple as exposing the self-adhesive backing and sticking directly onto the back of the mirror.

# What if my mirror is a different size?

The Demisters can be combined for larger mirrors. However, you must leave a minimum of 5mm between each Demister.

You must also leave a minimum of 10mm around the edges to ensure the Demisters fit.

# How safe are they in the bathroom?

The Mirror Demisters have an IP57 rating and are suitable for zones 1 and 2 according to BS7671, making them safe for bathrooms.

The Demister can either be connected directly to a switched light circuit, designed to activate the Demister when the light is switched on or via a separate switch connected to the main lighting circuit.

The world's **best-selling** floor heating brand



When it comes to luxury, nothing beats the comfort of a soft, warm towel. Warmup heated Towel Rails not only bring comfort, they also help to heat a bathroom.

Committed to innovation, whilst at the same time being energy efficient, Warmup's range of traditional and contemporary Towel Rails offer a solution to cater for all preferences and budget.



		Model		
Features	Technical Data		HTR 800x600	HTR 800x600C
Sleek contemporary design	Concealed Wiring Adaptor available	✓	✓	✓
Even heat all at once and energy efficient	Number of Bars	6	7	7
Discreet with concealed cable kit	Height mm	680	800	800
Versatile and easily installed into new or existing homes	Width mm	450	600	600
Fixing accessories kit, including a diamond drill bit (for tiles), for installation convenience	Depth mm	120	120	150
European compliant and CE marked	BTU output	188	341	341
5-Year Warranty	Wattage	55	100	100
	Amps @ 230Vac	0.23	0.43	0.43
Warmup 5 YEAR	IP Rating	IP34	IP34	IP34
WARRANTY				

Call us now 0345 345 2288 or visit www.warmup.co.uk



 $\bigoplus$ 

Size & Description	Price (Excl. 20% VAT)
HTR 680 x 450	£196.66
HTR 800 x 600	£244.58
HTR 800 x 600 - Curved bars	£279.58
Concealed Wiring Adaptor	£10.41

Scan the code for more information about this product.

Always refer to the installation manual prior to commencing your project.



# Installation Guide

# (Refer to installation manual for complete instructions)

The Towel Rails can be mounted by holding the Towel Rail in the desired position on the wall. Mark the position on the wall, remove the Towel Rail and drill holes into the tile/wall. Screw wall anchors into position, affix the Towel Rail onto the anchors and tighten with an allen key. Feed or recess power cables to point of connection.

The Towel Rail must be wired by a certified electrician.



# What material are the Towel Rails made from?

Warmup heated Towel Rails are made from the highest quality stainless steel.

# Do I need any special tools?

<del>( ( )</del>

The kit comes complete with fixing accessories, including a diamond drill attachment for tiles for installation convenience.

### What can I fix the Towel Rail onto?

The Towel Rail is designed to be fixed through wall cladding into solid wall framing, solid cement or masonry walls. Plasterboard toggles, at least 3mm diameter, may be used for two of the towel rail fixings.





 $\bigoplus$ 



# Outdoor Heating Solutions

When it comes to safety in winter, every precaution should be taken. Using Warmup's outdoor heating solutions mean dangerous ice and snow build-up is reduced in concrete, paved or asphalt areas minimising the risk of accidents.

# For Commercial and Residential use

Warmup® offers a range of solutions, whether commercial walkways, loading docks and ramps or residential driveways and stairs.

# **Snow Melting Cables**

The resistance-heating element has a single end connection and is completely grounded and safe. The 25W/m cable is ideal for outdoor areas in concrete, under pavers or asphalt.

The Snowmelt Cable is available in 2 different versions to suit concrete/slab and asphalt and offers a 10 year warranty.



For more information on the systems available or application of Snowmelt, please contact our Sales Support Team on 0345 345 2288 or visit www.warmup.co.uk



Scan the code for more information about this product.

Always refer to the installation manual prior to commencing your project.





# Self-Regulating Cable

During the winter months when the temperature drops and the snow fall increases, roofs and gutters are affected. Warmup's Self-Regulating Cable is perfect to protect pipes from freezing and gutters, roofs and downspouts from dangerous accumulation of ice and snow.

One of the unique differences between the Self-Regulating Cable and traditional heating cables is that the Self-Regulating Cable can be cut to the exact length required without damaging the heating properties of the cable.

Once the cable is in operation, it de-ices roofs and gutters from snow build-up by responding to the ambient temperatures the heating output increasing, the colder the weather. This ambient response function provides an energy efficient solution as it only increases its heating output when needed and achieves freeze protection by creating clear drain paths required for melted snow and ice to flow freely, avoiding the adverse results of winter.

For more information on the application of the Self-Regulating Cable, please contact our Sales Support Team on 0345 345 2288 or visit www.warmup.co.uk





The world's best-selling floor heating brand



# Warmup® patio heaters emit radiant heating to warm an area up to 10m<sup>2</sup>

- Heaters can be fixed or you can purchase a tripod to give flexibility to move the heater
- Heats-up in seconds, provides coverage of c.10m<sup>2</sup>
- Cost effective 5 times CHEAPER to run than an equivalent gas heater
- Heaters are water-resistant
- Guaranteed for 5,000 hours of usage
- No need to refill

Scan the code for more information about this product.

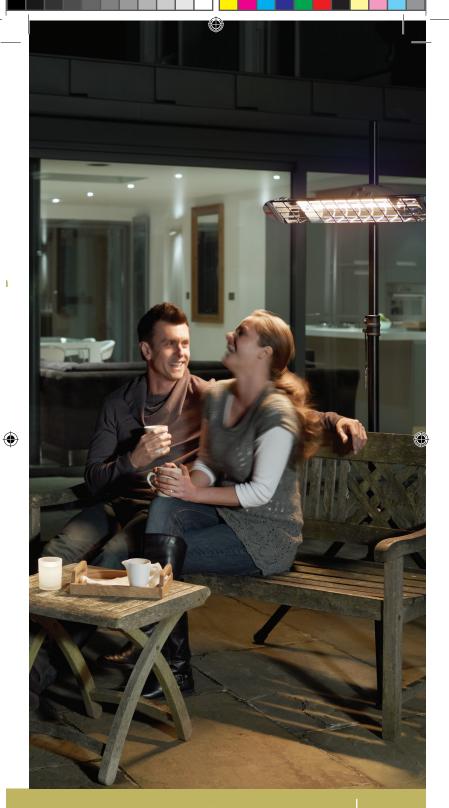
Always refer to the installation manual prior to commencing your project.

**Price Guide** 



Warmup Patio heater with tripod

Code	Description	Price (Excl. 20% VAT)
WPH - 1760	Patio Heater	£166.66
WPH-TP	Patio Heater Tripod	£104.17
WPH - TPB	Tripod Bracket	£35.00





# **Electric heating portfolio**



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

Over 2 million installations in more than 65 countries

# Experience **MyHeating**™

Download now for iOS and Android



MyHeating App





### SmartGeo™

Automatically at the right temperature. 25% lower energy usage.

# **EasySwitch**™

Always on the best tariff, automatically. Saving on average £210.

### Easy to use

Simple and secure set-up using WiFi with 24/7 technical support.





Warmup Plc 702 & 704 Tudor Estate Abbey Road London, NW10 7UW



# 4iE SMART WIFI

T: 0345 345 2288 E: uk@warmup.com F: 0345 345 2299 W: www.warmup.co.uk

Please scan the QR code for more information

The WARMUP word and associated logos are trade marks. ©Warmup plc 2016 Reg'd. TM Nos. 1257724, 4409934, 4409926, 5265707. E & OE v11-10/2016

