# **StickyMat System**

## Overview

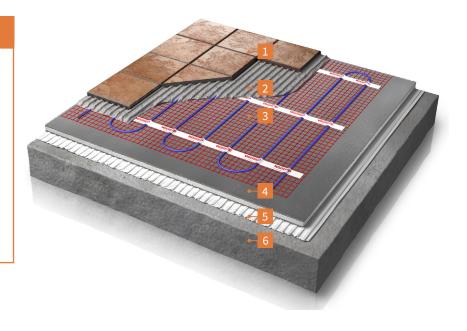
The Warmup StickyMat System is designed for use within the adhesive layer under tiles or within a levelling compound under other floor finishes. The fixed spacing and self-adhesive mat makes installation of regularly shaped rooms quick and easy whilst ensuring precision is maintained. The pressure sensitive adhesive securely binds the mats to the floor, keeping them flat and ensuring the application of tile adhesive is snag free whilst allowing the mats to be easily repositioned as needed.

The ultra-thin, 2mm multistrand, dual core heating cable, is double insulated with an advanced fluoropolymer making it exceptionally tough and easy to tile over.

For floors using a vinyl, carpet, timber or other UFH compatible floor finishes including tiles the system can be covered with a levelling compound to provide a flat and level floor surface. StickyMats are available in both 150W/ m² and 200W/m² variants making them ideal for use as the primary heat source within modern homes and most older properties.

#### **FLOOR CONSTRUCTION**

- 1 Floor finish
- 2 Tile adhesive or levelling compound
- 3 Warmup StickyMat
- 4 Warmup Coated Insulation Board
- 5 Flexible Tile Adhesive
- 6 Subfloor







www.warmup.co.uk

## Technical Data

TECHNICAL DATA - S	tickyMat	
OPERATING VOLTAGE	220 - 240v: 50Hz	
IP RATING	IPX7	
WIDTH	500mm	
MAT THICKNESS	3mm	
CABLE THICKNESS	1.8mm	
OUTPUT RATING	150W/m² 200W/m²	
INNER INSULATION	ETFE	
OUTER INSULATION	ETFE	
MIN. INSTALLATION TEMP	5°C	
CONNECTION	3m LONG "COLDTAIL" CONNECTION	

## **Features**

- StickyMats are available in both 150W/m<sup>2</sup> and 200W/m<sup>2</sup> variants
- Ultra-thin, 1.8mm cable multistrand, dual core heating cable is double insulated with an advanced fluoropolymer making it exceptionally tough and easy to tile over
- Ideal for regular shaped rooms, where the 0.5m wide mats can be rolled out across the floor in parallel runs.
- Pressure sensitive adhesive securely binds the mats to the floor keeping them flat for fast and secure installation
- BEAB Approved and CE marked meeting the highest safety standards for ultimate piece of mind **CE BEAB**Approved



Lifetime Warranty & SafetyNet Installation Guarantee SAFETY Net<sup>™</sup>



# Technical Data

PRODUCT CODE
SPM 1
SPM 1.5
SPM 2
SPM2.5
SPM 3
SPM 3.5
SPM 4
SPM 4.5
SPM 5
SPM 6
SPM 7
SPM 8
SPM 9
SPM 10
SPM 11
SPM 12
SPM 15

	SPM 150W/m <sup>2</sup>						
AREA TO BE HEATED (m²)	POWER (W)	LOAD (A)	RESISTANCE (Ω)	RESISTANCE BANDS (Ω)			
1	150	0.65	353	335.4 - 370.7			
1.5	225	0.98	235	223.3 - 246.8			
2	300	1.30	176	167.2 - 184.8			
2.5	375	1.63	141	134.0 - 148.1			
3	450	1.96	118	112.1 - 123.9			
3.5	525	2.28	101	96.0 - 106.1			
4	600	2.61	88	83.6 - 92.4			
4.5	675	2.93	78	74.1 - 81.9			
5	750	3.26	71	67.5 - 74.6			
6	900	3.91	59	56.1 - 62.0			
7	1050	4.57	50	47.5 - 52.5			
8	1200	5.22	44	41.8 - 46.2			
9	1350	5.87	39	37.1 - 41.0			
10	1500	6.52	35	33.3 - 36.8			
11	1650	7.17	32	30.4 - 33.6			
12	1800	7.83	29	27.6 - 30.5			
15	2250	9.78	24	22.8 - 25.2			

PRODUCT CODE  2SPM 0.5  2SPM 1  2SPM 1.5  2SPM 2  2SPM 2.5  2SPM 3  2SPM 3.5  2SPM 4  2SPM 4.5  2SPM 5  2SPM 6  2SPM 7  2SPM 8  2SPM 9  2SPM 10  2SPM 15	
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2SPM 4.5 2SPM 5 2SPM 6 2SPM 7 2SPM 8 2SPM 9	2SPM 3.5
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2SPM 6 2SPM 7 2SPM 8 2SPM 9 2SPM 10	2SPM 4.5
2SPM 7 2SPM 8 2SPM 9 2SPM 10	2SPM 5
2SPM 8 2SPM 9 2SPM 10	2SPM 6
2SPM 9 2SPM 10	2SPM 7
2SPM 10	2SPM 8
	2SPM 9
2SPM 15	2SPM 10
	2SPM 15

	2SPM 200W/m²							
AREA TO BE HEATED (m²)	POWER (W)	LOAD (A)	RESISTANCE (Ω)	RESISTANCE BANDS (Ω)				
0.5	100	0.44	529	502.6 - 555.5				
1	200	0.87	265	251.8 - 278.3				
1.5	300	1.30	176	167.2 - 184.8				
2	400	1.74	132	125.4 - 138.6				
2.5	500	2.17	106	100.7 - 111.3				
3	600	2.61	88	83.6 - 92.4				
3.5	700	3.04	76	72.2 - 79.8				
4	800	3.48	66	62.7 - 69.3				
4.5	900	3.91	59	56.1 - 62.0				
5	1000	4.35	53	50.4 - 55.7				
6	1200	5.22	44	41.8 - 46.2				
7	1400	6.09	38	36.1 - 39.9				
8	1600	6.96	33	31.4 - 34.7				
9	1800	7.83	29	27.6 - 30.5				
10	2000	8.70	26	24.7 - 27.3				
15	3000	13.04	18	16.7 - 18.5				

NOTE: To cover larger areas, several kits should be used together.

## **WARMUP COMPONENTS**

### **Insulation Boards**

Warmup® Insulation Boards are a water resistant, insulated tile backer board made of extruded polystyrene, faced on both sides with a fibreglass mesh embedded into a thin cement polymer mortar.

They have high thermal insulation properties for energy efficiency and an added benefit of sound absorption.

INSBOARD - TECHNICAL SPECIFICATIONS									
MODEL THICKNESS WIDTH LENGTH WEIGHT (mm) (mm) (kg)									
INSBOARD6MM	6	600	1250	1.95	0.16				
INSBOARD(PK1)	10	600	1250	2.22	0.28				
INSBOARD20MM	20	600	1250	2.48	0.58				
INSBOARD50MM	50	600	1250	3.26	1.50				



Warmup Insulation Boards have zero Ozone Depletion Potential (ODP) and a Global Warming Potential (GWP) of less than 5

### **Thermostat**



# 4iE SMART WIFI

For Central Heating and Underfloor Heating Systems

Connected to the internet by WiFi, it can be controlled from a smart phone, tablet or computer as well as its own touchscreen interface. It learns how homeowners use their heating and the unique way each zone reacts. It uses this knowledge to suggest ways to save energy, such as what temperature should be set when the area is not in use and when the heating can be turned off earlier with no noticeable impact on comfort.

Personalise your 4iE with uploadable photo backgrounds and changeable, textured overlays.



#### 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



#### Easy to use

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

# **Cement Coated Insulation Boards**

## Overview

Warmup Insulation Boards are manufactured from water resistant extruded polystyrene, finished on both faces with a thin layer of fibreglass reinforced cement. They are available in a range of thicknesses, from 6mm to 50mm, to individual project requirements.

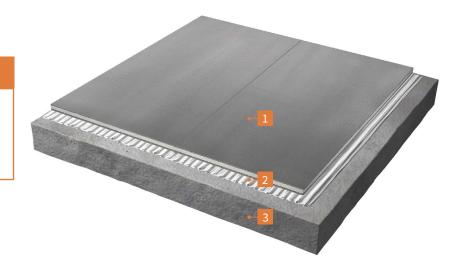
They are ideal for tile backing applications on both walls and floors, with the internal layer of insulation capable of supporting 30 tonnes per square metre. The 0.5mm thick cement coating provides an excellent surface for tile adhesive, plaster and smoothing/levelling compounds, with no priming required.

The low thermal conductivity of the insulation enhances the efficiency of underfloor heating systems, even when used over pre insulated sub floors. This is because they reduce the thermal mass of the floor, significantly reducing the amount of heat absorbed by the subfloor. This allows the underfloor heating system to warm the floor and the room up faster and ensures the floor cools down faster after use. By reducing the amount of time the room takes to warm up and cool down, the room can spend longer at its cooler set back temperature, reducing its heat loss.

The waterproof insulation panels are suitable for bathrooms and showers as well as dry rooms, allowing the same construction to be used throughout

#### **FLOOR CONSTRUCTION**

- 1 Warmup Coated Insulation Board
- 2 Flexible Tile Adhesive
- 3 Subfloor







# Technical Data

TECHNICAL DATA - Insulation Boards	;						
PRODUCT CODE	INSBOARD6	INSBOARD(PK1)	INSBOARD20	INSBOARD30	INSBOARD40	INSBOARD50	
THICKNESS - mm	6 mm	10 mm	20 mm	30 mm	40 mm	50 mm	
WIDTH - mm			60	)			
LENGTH - mm			125	0			
AREA - m²			0.7	5			
WEIGHT - kg (kg/m²)	2.2 (2.9)	2.3 (3.1)	2.5 (3.4)	2.8 (3.7)	3.0 (4.0)	3.2 (4.3)	
THERMAL CONDUCTIVITY - W/mK	0.033						
THERMAL RESISTANCE - m <sup>2</sup> K/W	0.12	0.24	0.55	0.85	1.15	1.45	
COMPRESSIVE STRENGTH - kPa	300						
BOND STRENGTH - kPa			220	)			
SHEAR BOND STRENGTH - kPa			32	5			
MAXIMUM TILE WEIGHT (for Walls) - kg/m <sup>2</sup>			60				
THERMAL EXPANSION COEFFICIENT (FOAM CORE ONLY) - mm/m per °C	≤0.07						
WATER ABSORPTION (2 DAY IMMERSION)(FOAM CORE ONLY) - % by volume	≤1.5						
FIRE RATING - Euroclass	E						
OZONE DEPLETION POTENTIAL - ODP	0						
GLOBAL WARMING POTENTIAL - GWP	<5						



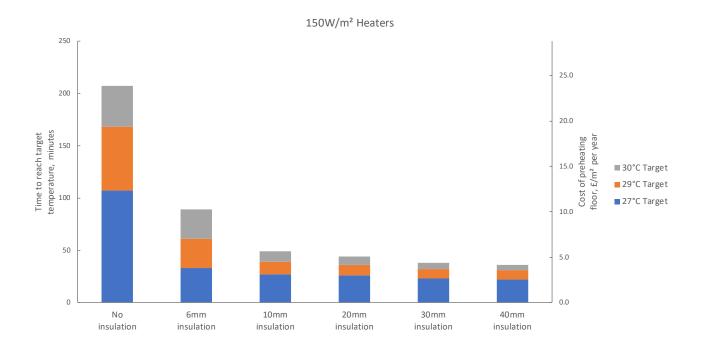
### **Features**

- Easy to cut and shape around fixtures with a knife or saw
- Comes in a range of thicknesses to suit floor and wall applications
- Can be fixed to solid or stud walls
- Excellent as internal wall insulation especially when compared to standard cement building boards and plaster boards
- Reduces heat loss and improves the underfloor heating systems response time
- **C** € marked for ultimate peace of mind
- Can be used to easily create a waterproof floors and walls in wet rooms, just by adding silicone sealant to the edges of the board before butting them tightly together
- High resistance to rot due to very low absorption rate

#### INSULATION BOARD EFFECT ON PREHEATING TIMES

Warmup has conducted extensive testing of its electric underfloor heating systems when used in combination with its range of Cement Coated Insulation Boards. The tests consisted of a 75mm screed subfloor, heated with a 150W/m2 under tile heating system. The range of Warmup Cement Coated Insulation Boards were each installed between the sub floor and the heated tiles with a reference construction that had none.

The chart below shows the response times and the resulting costs of preheating the floors from 18°C to three different temperature settings. Even just a 6mm board makes a significant improvement to system performance and provides savings that will quickly recover their initial purchase price.



<sup>\*</sup>Cost assumptions: 12.66p/kWh - system on twice a day, for 6 months (182 days) of the year.

# Tempo™ Digital Thermostat



### Overview

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 do not need it.

Suitable with all Warmup underfloor heating systems, the tempo thermostat allows you to control the temperature of your underfloor heating to give you comfort, warmth and luxury to match your specific needs.

#### Better

Easy-to-use interface and intuitive design.

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.

### Faster

Set-up takes just minutes to get right the first time. It will help avoid wasting energy and achieve savings on utility bills.

#### Smarter

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.



## Features

- Stylish and contemporary design
- Clear screen displaying program details
- Proportional Adaptive Learning
- Easy control with dial and sliders
- Available in Porcelain White and Piano Black
- BEAB Approved and CE marked meeting the highest safety standards for ultimate piece of mind CE (BEAB)



3yr Warranty with option to upgrade to Lifetime Warranty



# **Technical Specifications**

TEMPO - TECHNICA	TEMPO - TECHNICAL SPECIFICATIONS					
INPUT VOLTAGE	230V +/- 15% at 50Hz					
MAX LOAD	16A (3680W)					
DIMENSIONS	(H/W/D): 90 x 113 x 23mm (from wall)					
BATTERY BACKUP	3 MONTHS (CR2032 BATTERY PROVIDED)					
SENSORS	AIR & FLOOR					
SENSOR TYPE	NTC10K 3m LONG (CAN BE EXTENDED TO 50m)					
IP RATING	IP20					
INSTALLATION DEPTH	35mm BACK BOX					
DISPLAY SIZE	45 X 50mm					
COMPATIBILITY	IDEAL FOR ELECTRIC & HYDRONIC UNDERFLOOR HEATING					
Er-P CLASS	IV					



# **Heated Towel Rails**



## Overview

Warmup electric heated towel rails are an excellent, energy efficient solution to provide an additional source of heat for your bathroom as well as year round towel drying and warming. The rails use dry heating technology meaning they are maintenance free with no risk of leaks.

The rails are available in both single bar and ladder models with a variety of finishes to suit any bathroom style. They are manufactured using high quality stainless steel (SS304) making them resistant to staining and corrosion, ideal for bathroom environments.

Installation is straightforward as the rails can either be connected into the rooms lighting circuit, enabling the towel rail when the lights are switched on or alternatively they can be controlled by an independent controller that provides power on demand.

Warmup heated towel rails are available in a wide range sizes and wattages to suit all bathrooms.







## **Features**

- Provides an excellent, energy efficient solution to provide an additional source of heat for your bathroom as well as year round towel drying and warming.
- Uses dry heating technology meaing they are maintenance free with no risk of leaks.
- Manufactured using high quality stainless steel (SS304) making them resistant to staining and corrosion, ideal for bathroom environments.
- Can connect to existing lighting circuit for automatic operation when light is switched or controlled by an independent controller that provides power on demand.
- CE Marked with 5 year warranty

## Technical Data







PRODUCT CODE	SIZE (mm)	CONNECTION	VOLTAGE	POWER (W)	BTU/hr	LOAD (A)	RESISTANCE +/- 10 % (Ω)
HTR-4ROPO	<b>4 Bar Ladder - Round Polished</b> 520(h) x 500(l) x 120(d) mm	3 m coldtail	230 V AC: 50 Hz	52	177.4	0.23	1017
HTR-4SQPO	4 Bar Ladder - Square Polished 435(h) x 525(l) x 120(d) mm	3 m coldtail	230 V AC: 50 Hz	52	177.4	0.23	1017





PRODUCT CODE	SIZE (mm)	CONNECTION	VOLTAGE	POWER (W)	BTU/hr	LOAD (A)	RESISTANCE +/- 10 % (Ω)
HTR-8ROPO	8 Bar Ladder - Round Polished 800(h) x 530(l) x 135(d) mm	3 m coldtail	230 V AC: 50 Hz	100	341.2	0.43	529
HTR-8SQPO	<b>8 Bar Ladder - Square Polished</b> 912(h) x 620(l) x 120(d) mm	3 m coldtail	230 V AC: 50 Hz	115	392.4	0.50	460