

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.

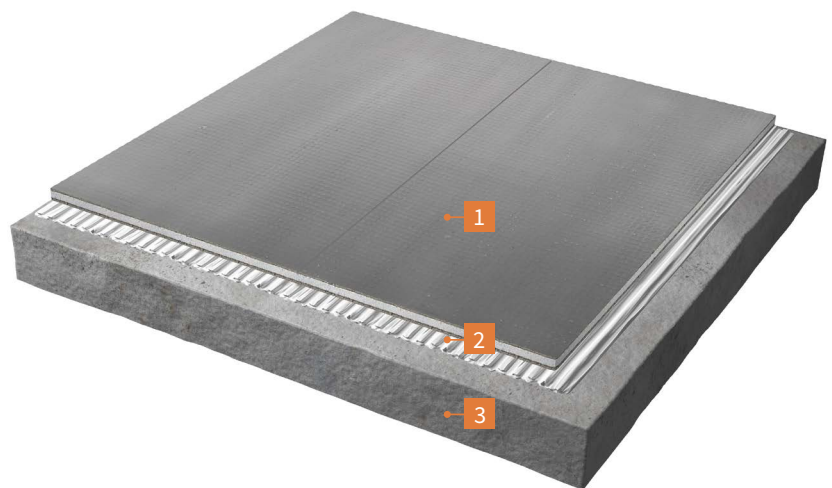
They are ideal for tile backing applications on both walls and floors, with the internal layer of insulation capable of supporting 30 tonnes per square metre. The 0.5mm thick cement coating provides an excellent surface for tile adhesive, plaster and smoothing/levelling compounds, with no priming required.

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



Electric
Heating System

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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	600					
LENGTH - mm	1250					
AREA - m ²	0.75					
WEIGHT - kg (kg/m ²)	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 ² 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	325					
MAXIMUM TILE WEIGHT (for Walls) - kg/m ²	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					



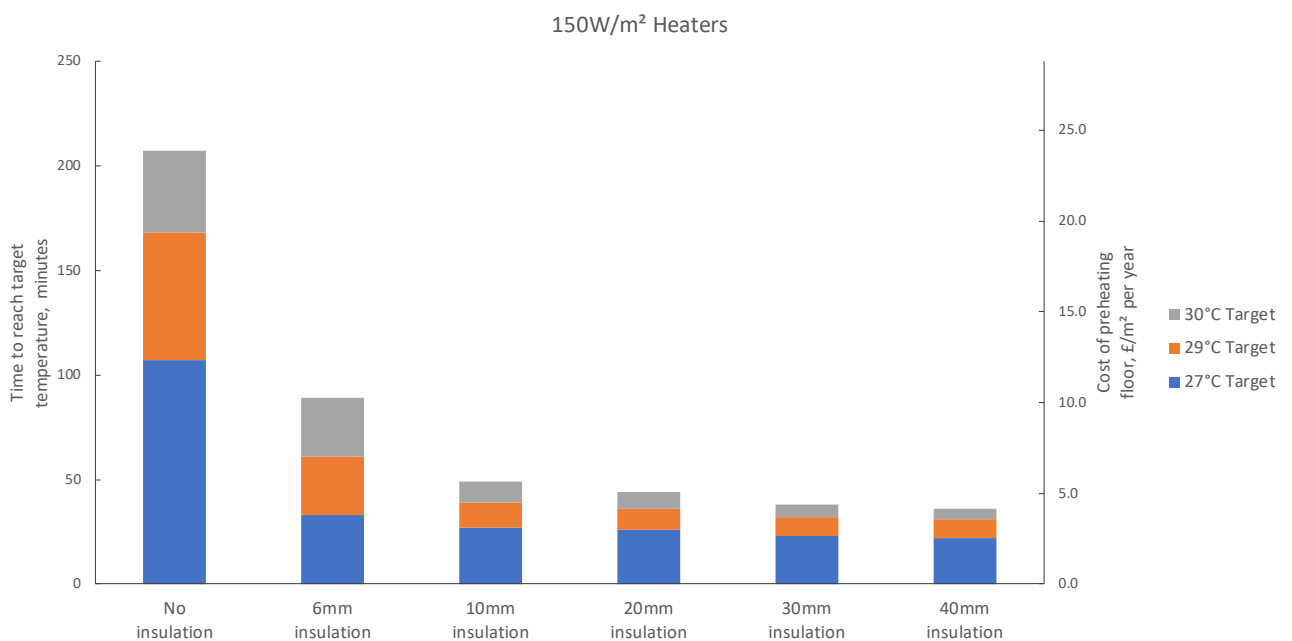
Features

- 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
- **CE** 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.



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

StickyMat System

Overview

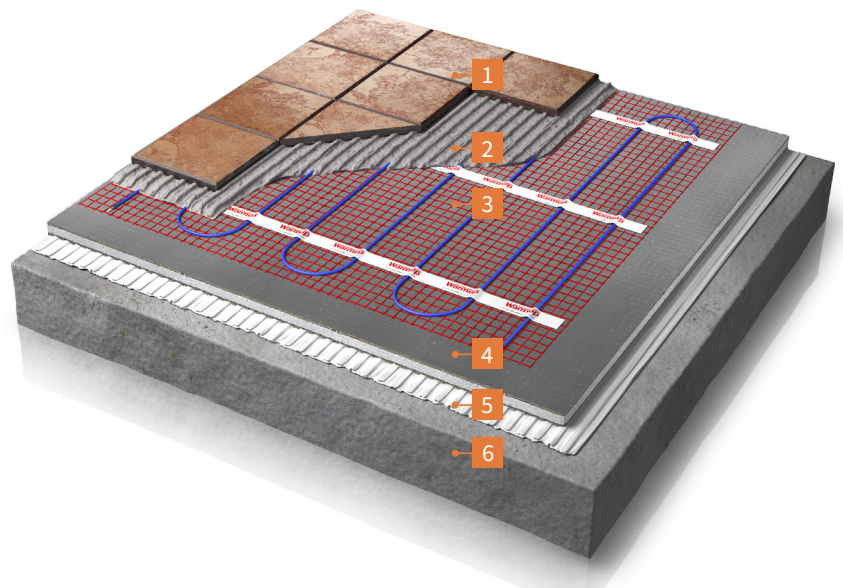
The Warmup StickyMat System is designed for use within the adhesive layer under tiles or within a levelling compound under other floor finishes. The fixed spacing and self-adhesive mat makes installation of regularly shaped rooms quick and easy whilst ensuring precision is maintained. The pressure sensitive 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



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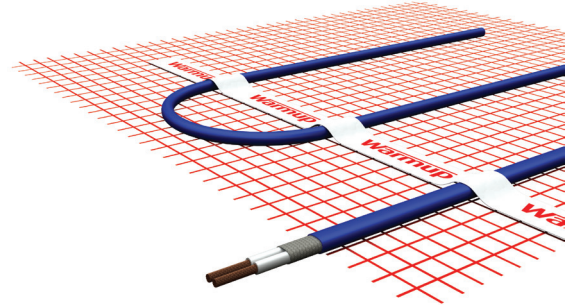
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Technical Data



TECHNICAL DATA - StickyMat



OPERATING VOLTAGE	220 - 240v: 50Hz
IP RATING	IPX7
WIDTH	500mm
MAT THICKNESS	3mm
CABLE THICKNESS	1.8mm
OUTPUT RATING	150W/m ² 200W/m ²
INNER INSULATION	ETFE
OUTER INSULATION	ETFE
MIN. INSTALLATION TEMP	5°C
CONNECTION	3m LONG "COLDTAIL" CONNECTION



Features

- StickyMats are available in both 150W/m² and 200W/m² 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  

- Lifetime Warranty & SafetyNet Installation Guarantee  

Technical Data

PRODUCT CODE	AREA TO BE HEATED (m ²)	SPM 150W/m ²			
		POWER (W)	LOAD (A)	RESISTANCE (Ω)	RESISTANCE BANDS (Ω)
SPM 1	1	150	0.65	353	335.4 - 370.7
SPM 1.5	1.5	225	0.98	235	223.3 - 246.8
SPM 2	2	300	1.30	176	167.2 - 184.8
SPM2.5	2.5	375	1.63	141	134.0 - 148.1
SPM 3	3	450	1.96	118	112.1 - 123.9
SPM 3.5	3.5	525	2.28	101	96.0 - 106.1
SPM 4	4	600	2.61	88	83.6 - 92.4
SPM 4.5	4.5	675	2.93	78	74.1 - 81.9
SPM 5	5	750	3.26	71	67.5 - 74.6
SPM 6	6	900	3.91	59	56.1 - 62.0
SPM 7	7	1050	4.57	50	47.5 - 52.5
SPM 8	8	1200	5.22	44	41.8 - 46.2
SPM 9	9	1350	5.87	39	37.1 - 41.0
SPM 10	10	1500	6.52	35	33.3 - 36.8
SPM 11	11	1650	7.17	32	30.4 - 33.6
SPM 12	12	1800	7.83	29	27.6 - 30.5
SPM 15	15	2250	9.78	24	22.8 - 25.2

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

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.

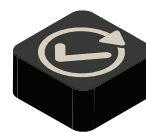
Personalise your 4iE with uploadable photo backgrounds and changeable, textured overlays.



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 £210.



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

StickyMat 3D™



Overview

Warmup StickyMat 3D is the perfect heating system for both wall and floor heating applications. Using StickyMat 3D on walls means heating the bathroom is that much easier and eliminates the need for radiators for greater design freedom.

The mat has been specifically designed so that there is a continuous, 100% earth braid, making it fully compliant with the latest edition of the Wiring Regulations for wall heating applications, eliminating the need for a second earth screen during installation.

StickyMat 3D is ideal for regularly shaped rooms as the 0.5 m wide mats can be easily applied to walls or floors in parallel runs and securely fixed to the substrate with the self-adhesive mesh, making installation quick.

The pressure sensitive adhesive on the mesh securely binds the mats to the substrate, 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, 1.8 mm multistrand, dual core heating cable, is double insulated with an advanced fluoropolymer making it exceptionally tough and easy to tile over.

StickyMat 3D is available in 200 W/m² mats which ensures the quickest heating response time for your room.



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Features

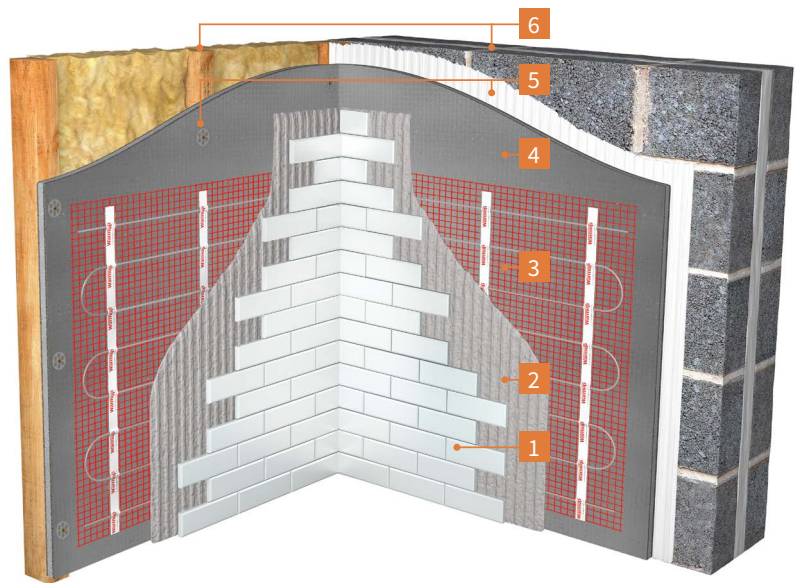
- StickyMat 3D™ is available 200 W/m² mats for quickest heating response time.
- 100% continuous earth braid, making it fully compliant with the latest edition of the Wiring Regulations for wall heating applications.
- Eliminates condensation and mould growth in heated areas.
- Ultra-thin, 1.8 mm multi-strand, 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 0.5 m wide mats can be rolled out in parallel runs.
- Pressure sensitive adhesive securely binds the mats to the floor or wall keeping them flat for fast and secure installation.
- BEAB Approved and CE marked meeting the highest safety standards for ultimate peace of mind.
- Lifetime Warranty & SafetyNet Installation Guarantee.



Substrates

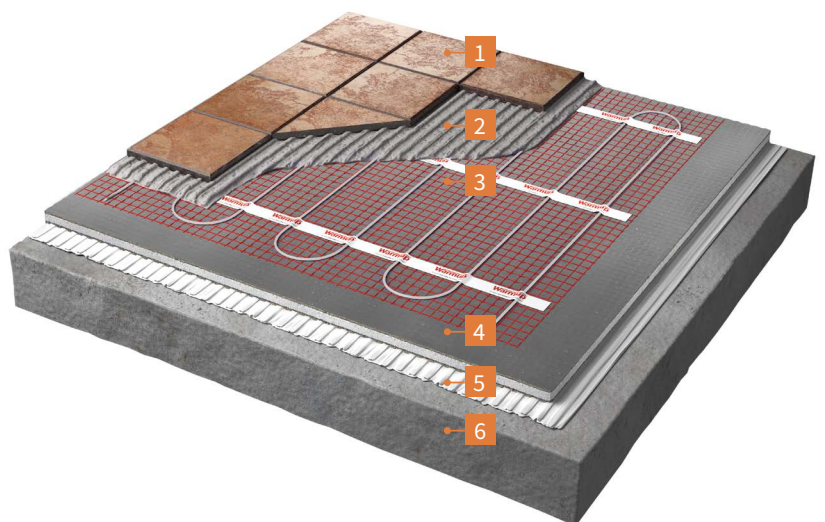
RECOMMENDED WALL CONSTRUCTION

- 1 Wall finish
- 2 Flexible tile adhesive or plaster
- 3 Warmup StickyMat 3D
- 4 Warmup Insulation Board
- 5 Flexible Tile Adhesive (Solid Walls)
Screw and Washer (Stud Walls)
- 6 Solid / Stud Wall



RECOMMENDED FLOOR CONSTRUCTION

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



Technical Specifications

TECHNCIAL SPECIFICATIONS - StickyMat 3D™ (200 W/m²)

OPERATING VOLTAGE	230 V AC : 50 Hz
OUTPUT RATING	200 W/m ²
WIDTH	500 mm (0.5 m)
MAT THICKNESS	3 mm
CABLE THICKNESS	1.8 mm
HEATING CORES	Multi-strand, dual core
EARTH PROTECTION	100% earth braid coverage
INNER INSULATION	ETFE
OUTER INSULATION	ETFE
IP RATING	IPX7
MIN. INSTALLATION TEMPERATURE	-10 °C
CONNECTION	3 m "coldtail" connection



MAT SIZE GUIDE - StickyMat 3D™ (200 W/m²)

PRODUCT CODE	HEATED AREA (m ²)	POWER (W)	LOAD (A)	RESISTANCE (Ω)	REFERENCE RESISTANCE BANDS (Ω)
2SMFW 0.5	0.5	100	0.43	529.0	502.6 - 555.5
2SMFW 1	1	200	0.87	264.5	251.3 - 278.7
2SMFW 1.5	1.5	300	1.30	176.3	167.5 - 185.1
2SMFW 2	2	400	1.74	132.3	125.7 - 138.9

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INSBOARD6MM	6	600	1250	2.2	0.14
INSBOARD(PK1)	10	600	1250	2.3	0.25
INSBOARD20MM	20	600	1250	2.5	0.53
INSBOARD30MM	30	600	1250	2.8	0.81
INSBOARD40MM	40	600	1250	3.0	1.08
INSBOARD50MM	50	600	1250	3.2	1.36



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Thermostat



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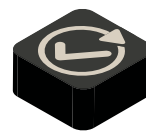
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EasySwitch™

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Easy to use

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

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.

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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
- 3yr Warranty with option to upgrade to Lifetime Warranty



Technical Specifications

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

