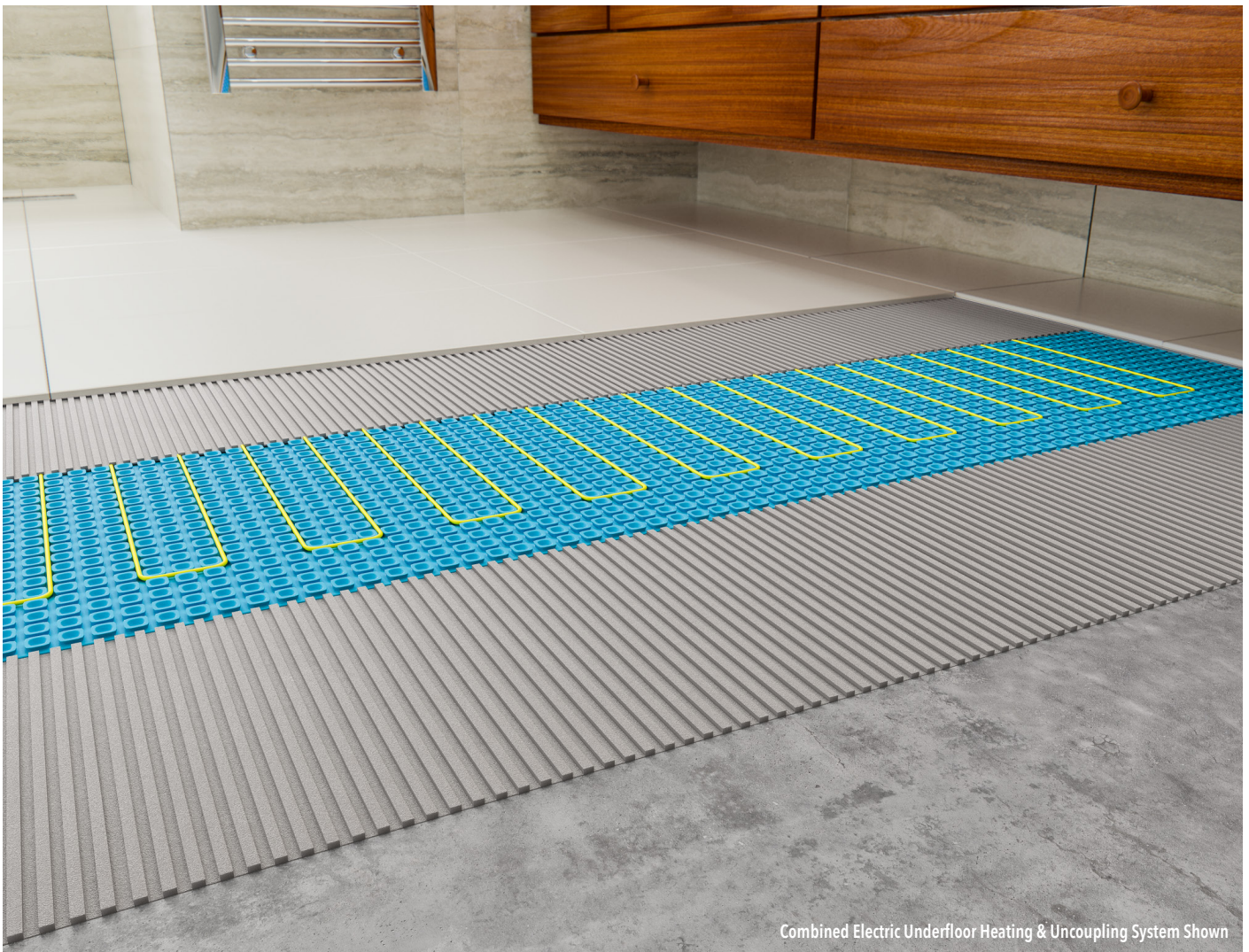# Electric Underfloor Heating

Don't want radiators in your minimalist bathroom?

Underfloor Heating is a great way to keep rooms warm. It is simple to install when tiling, helps with condensation, provides heat across the whole room, and feels lovely and cosy under bare feet.

top tips "Floor heating has lower running costs than central heating systems, and is a more environmentally-conscious way to heat your home."

Price includes VAT

esteem®

Combined Electric Underfloor Heating & Uncoupling System Shown

Feel the glow from beneath your feet.

Providing the ultimate feeling of comfort and luxury, it is inexpensive to install and run.

Benefits

Affordable luxury.

Underfloor heating doesn't have to be an expensive extravagance.

Our UFH (UnderFloor Heating) range is an economical way to bring warmth to any room.
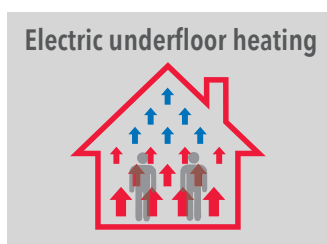
Standard radiator system
- Heat rises from floor to ceiling
- Heat loss through roof
- Creates draughts and uneven heat
- Cold floors and hot heads

Underfloor heating system
- Even heat spread
- Comfortable room temperature
- No draughts
- Warm floors

Standard radiator system
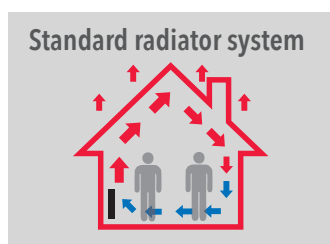
Convection causes drafts and uneven heat spread

Electric underfloor heating

Even spread of heat for maximum comfort

Running Costs*

Time (hours)	Heated Area						
	1m²	2m²	4m²	5m²	10m²	15m²	25m²
1	3.6p	7.2p	14.4p	18p	36p	54p	90p
2	7.2p	14.4p	28.8p	36p	72p	108p	180p
3	10.8p	21.6p	43.2p	54p	108p	162p	270p
4	14.4p	28.8p	57.6p	72p	144p	216p	360p
5	18p	36p	72p	90p	180p	270p	450p
6	21.6p	43.2p	86.4p	108p	216p	324p	540p
7	25.2p	50.4p	100.8p	126p	252p	378p	630p
8	28.8p	57.6p	115.2p	144p	288p	432p	720p

*These running cost calculations assume an output of 150w/m² in a well insulated environment and an electricity tariff of 28p/kWh

Low Running Costs

Our underfloor heating offers many economical advantages;

- Rapid heat up times
- Fully programmable touchscreen thermostat
- UFH can be programmed to allow for different times and temperatures in different rooms

All dimensions are in mm

Applications

UFH products have a wide range of applications and can be installed on timber and concrete substrates.
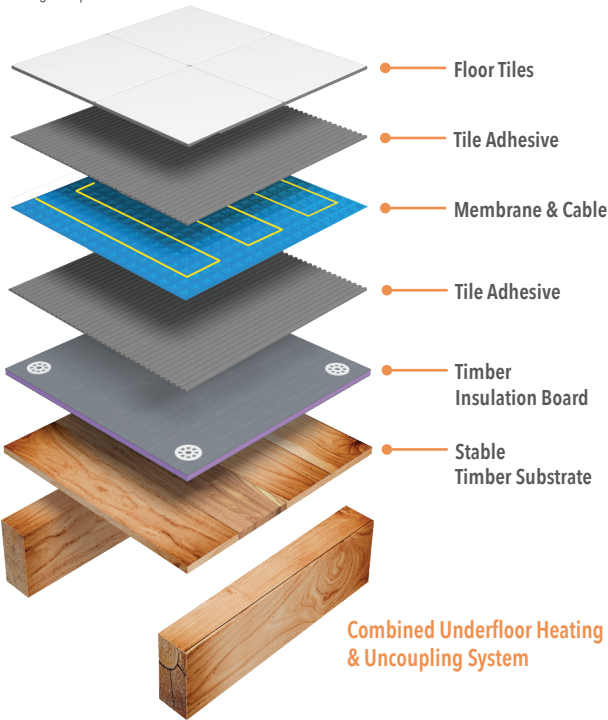
Suitable for almost all floor finishes; here are some examples.
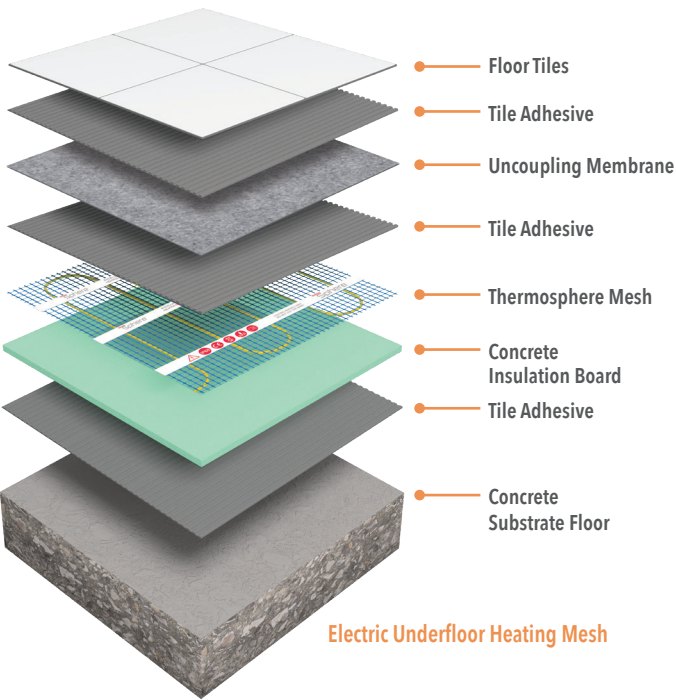
What type of UFH do I require?

Product	Tiles	Stone	Laminate	Porcelain	Carpet
150w/m² Mat	•	•	•	•	•
200w/m² Mat	•	•	•	•	•
Membrane & Cable	•	•	•	•	•

For small awkward areas use Membrane and cable. For regular areas 1-24m² use 150w/m² mat.
For high output use 200w/m² mat.

Electric Underfloor Heating Mesh

- Floor Tiles
- Tile Adhesive
- Uncoupling Membrane
- Tile Adhesive
- Thermosphere Mesh
- Concrete Insulation Board
- Tile Adhesive
- Concrete Substrate Floor

Combined Underfloor Heating & Uncoupling System

- Floor Tiles
- Tile Adhesive
- Membrane & Cable
- Tile Adhesive
- Timber Insulation Board
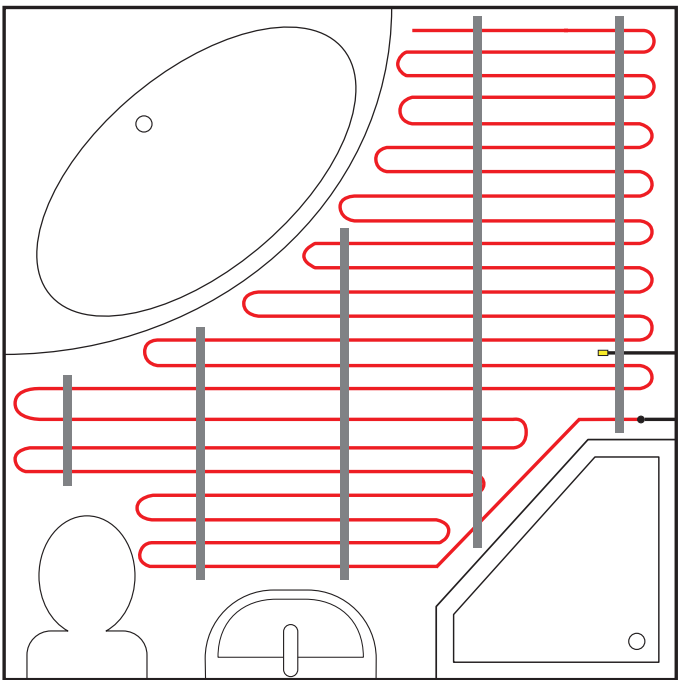- Stable Timber Substrate

Always check with your flooring manufacturer before installing over an electrical underfloor heating system.

Cable Layout
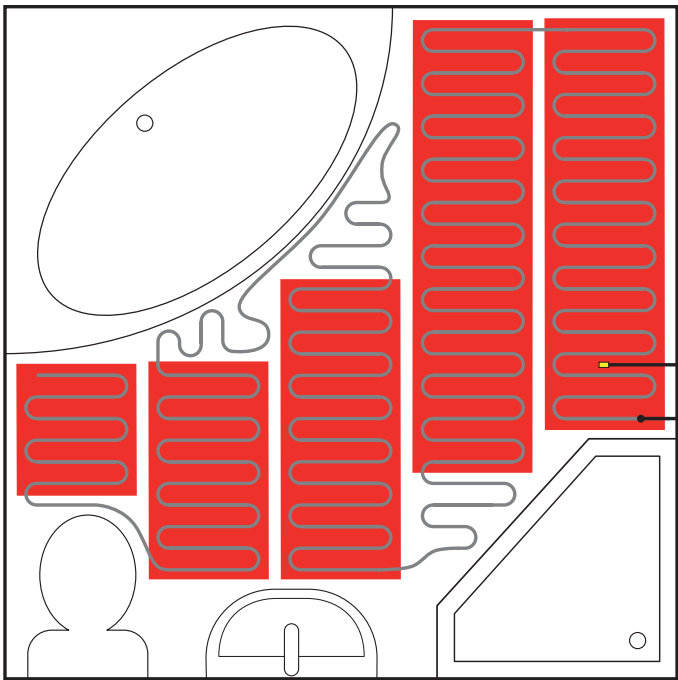
Simple installation in irregular areas

Diagram below shows a typical bathroom layout.

Mat System Layout

Simple, flexible installation

Diagram below shows a typical bathroom layout.

Price includes VAT

esteem

Installation

**Efficient underfloor heating.**

UFH mats can be laid onto any substrate and we always recommend that you lay them onto insulation board for maximum efficiency and potentially reduced running costs.

There are two types of insulation board - Coated and Uncoated.

- Can make underfloor heating 50% more efficient
- From just 6mm thick
- Fast, simple installation
- 100% water and rot proof

Conduit & Sensor Installation

Diagram below shows an insulated timber substrate.
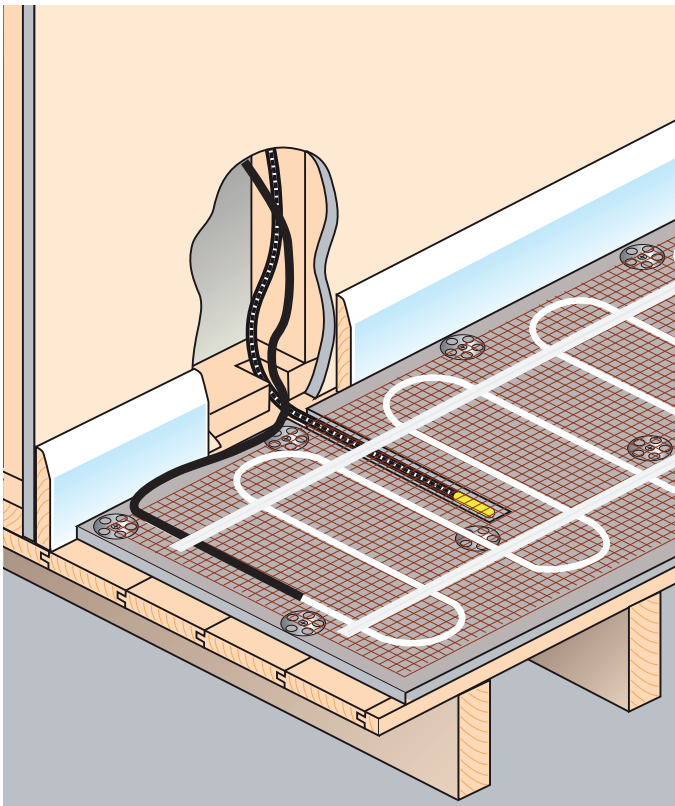
Vastly Reduce Heat Up Times

Floor construction and finish will govern heat up times.

Sufficient insulation will greatly reduce heat up times and you will notice the difference in your energy bills. A well-insulated UFH system can be up to 50% more efficient. Average heat up times can be seen in the table below:

Concrete & 50mm Insulation Board	**0.5 hours**
Concrete & 10mm Insulation Board	**1.0 hour**
Un-insulated Concrete	**5.0 hours**
Concrete & Sub Surface Insulation	**3.0 hours**
Chipboard & 10mm Insulation Board	**0.5 hours**
Un-insulated Chipboard	**1.0 hour**

All dimensions are in mm

Insulation Boards - Coated

Insulation Boards - Uncoated
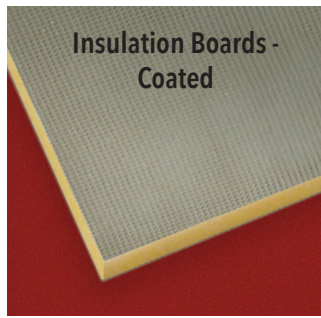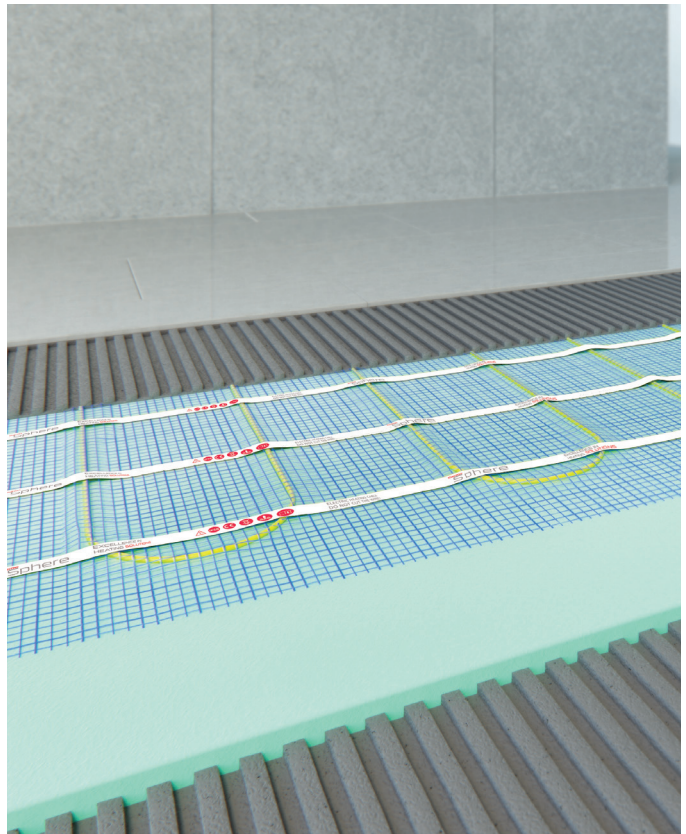
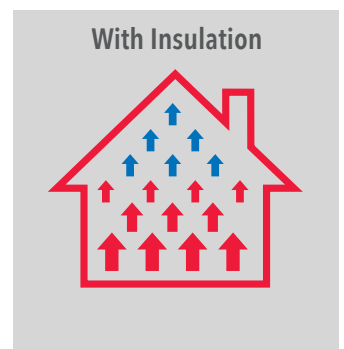For use with timber substrates   For use with concrete substrates
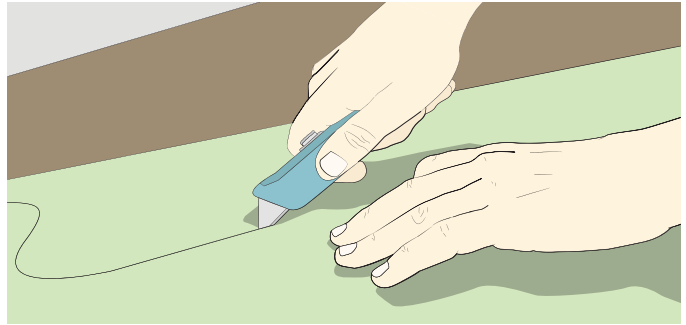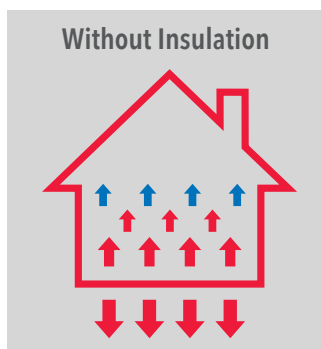

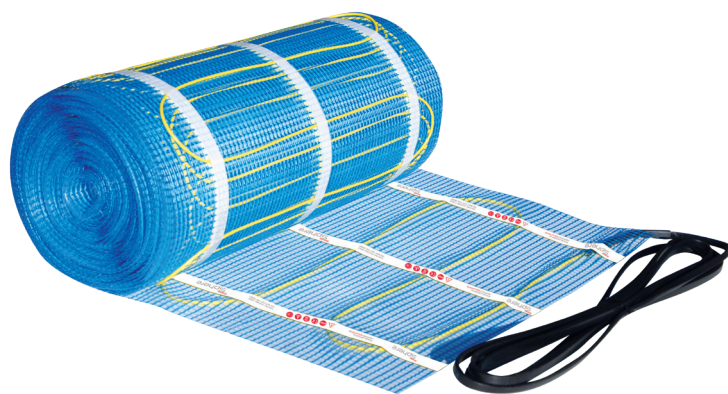**Cuts easily using a sharp blade**

Thermosphere Mesh with insulation board bathroom installation

Without Insulation   **With Insulation**

Avoid heat loss and maximise the efficiency of your underfloor heating system

Electric Underfloor Heating
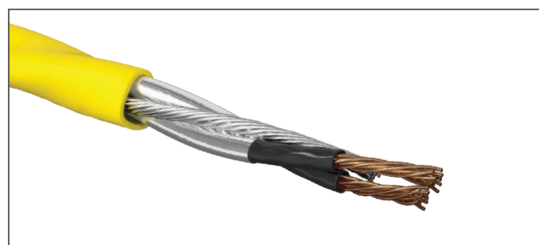
Features 3.5mm Twisted Twin Cable

Unique, stress free **Twisted Twin** cable construction creates a longer lasting heating cable with zero electromagnetic field. Safe even in wet areas.

Thermosphere Mesh - 150W/m² Heating Mat

Code	Mat/Cable Length	Output (W)	Area (M²)	Voltage (V)	Resistance (Ohms)	RRP
TSM-150-0100	2.0	150	1.0	230	353	£72.00
TSM-150-0150	3.0	225	1.5	230	231	£108.00
TSM-150-0200	4.0	300	2.0	230	176	£144.00
TSM-150-0250	5.0	375	2.5	230	141	£180.00
TSM-150-0300	6.0	450	3.0	230	118	£216.00
TSM-150-0400	8.0	600	4.0	230	88	£288.00
TSM-150-0500	10.0	750	5.0	230	70	£360.00
TSM-150-0600	12.0	900	6.0	230	59	£432.00
TSM-150-0800	16.0	1200	8.0	230	44	£576.00
TSM-150-1000	20.0	1500	10.0	230	35	£720.00
TSM-150-1200	24.0	1800	12.0	230	29	£864.00

Thermosphere Mesh - 200W/m² Heating Mat

Code	Mat/Cable Length	Output (W)	Area (M²)	Voltage (V)	Resistance (Ohms)	RRP
TSM-200-0100	2.0	200	1	230	265	£78.00
TSM-200-0150	3.0	300	1.5	230	176	£117.00
TSM-200-0200	4.0	400	2	230	132	£156.00
TSM-200-0250	5.0	500	2.5	230	106	£195.00
TSM-200-0300	6.0	600	3	230	88	£234.00
TSM-200-0400	8.0	800	4	230	66	£312.00
TSM-200-0500	10.0	1000	5	230	53	£390.00
TSM-200-0600	12.0	1200	6	230	44	£468.00
TSM-200-0800	16.0	1600	8	230	33	£624.00
TSM-200-1000	20.0	2000	10	230	27	£780.00
TSM-200-1200	24.0	2400	12	230	22	£936.00

Programmable Thermostat

- Improved 7 day 6 event schedule
- Manual temperature boost
- Floor temperature sensor
- Ambient temperature sensor
- Wi-Fi versions available
- Available in Black or White

Manual Thermostat

- Simple on off controls
- Easy temperature adjustment
- Adjustable temperature limits
- Floor temperature sensor
- Ambient temperature sensor
- Available in Black or White

Programmable Thermostat

Code	Description	RRP
SCP-W-01	Programmable Control - White	£190.80
SCP-B-01	Programmable Control - Black	£190.80
WSK-B-01	Wireless Programmable Control - Black & Hub Kit	£298.80

Manual Thermostat

Code	Description	RRP
SCM-W-01	Manual Control - White	£166.80
SCM-B-01	Manual Control - Black	£166.80

Price includes VAT

esteem
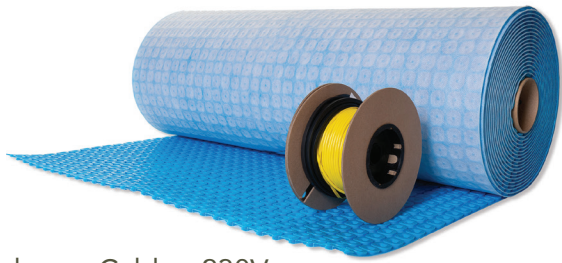
Membrane Cable - 230V

Code	Cable Length (M)	Output (W)	Area (130W M²)	Area (195W M²)	Resistance (Ohms)	RRP
HDMC-012-0150	12.0	150	1.15	0.8	352.7	£82.80
HDMC-018-0225	18.0	225	1.73	1.15	235.1	£124.80
HDMC-025-0300	25.0	300	2.31	1.5	176.3	£166.80
HDMC-031-0375	31.0	375	2.88	1.9	141.1	£207.60
HDMC-037-0450	37.0	450	3.46	2.3	117.6	£249.60
HDMC-050-0600	50.0	600	4.62	3.1	88.2	£332.40
HDMC-061-0750	61.0	750	5.77	3.9	70.5	£415.20
HDMC-075-0900	75.0	900	6.92	4.6	58.8	£498.00
HDMC-100-1200	100.0	1200	9.23	6.2	44.1	£664.80
HDMC-125-1500	125.0	1500	11.54	7.7	35.3	£830.40
HDMC-150-1800	150.0	1800	13.85	9.2	29.4	£997.20
HDMC-200-2400	200.0	2400	18.46	12.31	22.0	£1,329.60
			3 stud space	2 stud space		

Decoupling Membrane

Code	Mat Length (M)	RRP
HDM-001	1 x 1	£28.20
HDM-005	5 x 1	£135.60
HDM-015	15 x 1	£406.80
HDM-SA-001	1 x 1 (Self Adhesive)	£36.60
HDM-SA-015	15 x 1 (Self Adhesive)	£549.00

Econoboard Uncoated

Code	Pack Size (Boards)	Thickness (mm)	Board Size (mm)	Board Area (M²)	Pack Area (M²)	RRP
CIB-006-20	20	6	1.2 x 0.6m	0.72	14.4	£265.20
CIB-105-10	10	10.5	1.2 x 0.6m	0.72	7.2	£196.80

Econoboard Coated

Code	Pack Size (Boards)	Thickness (mm)	Board Size (mm)	Board Area (M²)	Pack Area (M²)	RRP
TIB-006-08	8	6	1.2m x 0.6m	0.72	5.76	330.00
TIB-010-06	6	10	1.2m x 0.6m	0.72	4.32	270.00
TIB-012-06	6	12	1.2m x 0.6m	0.72	4.32	282.00
TIB-020-06	6	20	1.2m x 0.6m	0.72	4.32	330.00
TIB-030-04	4	30	1.2m x 0.6m	0.72	2.88	254.40
TIB-040-03	3	40	1.2m x 0.6m	0.72	2.16	222.00
TIB-050-02	2	50	1.2m x 0.6m	0.72	1.44	157.20

Membrane and Cable
- Add any cables to get required size
- Zero maintenance
- Simple installation
- Fully earthed
- Cost effective

Heating Mat
- Fully self adhesive
- Adds only 3mm build up
- Efficient heating
- Safe, simple, and reliable
- Cost effective

Insulation
- Coated or uncoated
- Makes UFH 50% more efficient
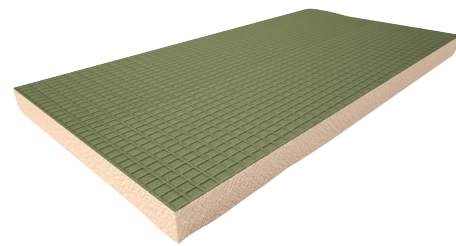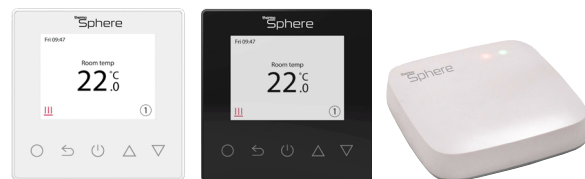- From 6mm thick
- Simple installation
- Cost effective

Dual Control Thermostat

- Ambient & floor sensors
- Portrait & landscape mode
- Available in Black & White
- Dual Relay for 2 in 1 control
- Control a tower rail or mirror heater
- 8 home screen colour options

SmartHome Touch Controls

- Amazon & Google assistant compatible
- Control from your mobile
- Ambient & floor sensors
- Available in Black or White
- Kit includes wireless hub
- Manual boost features

Dual Control Thermostat

Code	Description	RRP
DC-W-01	Thermotouch Dual Control - White	£322.80
DC-B-01	Thermotouch Dual Control - Black	£322.80

SmartHome Touch Controls

Code	Description	RRP
SHK-W-01	SmartHome Control & Hub Kit - White	£334.80
SHK-B-01	SmartHome Control & Hub Kit - Black	£334.80

All dimensions are in mm