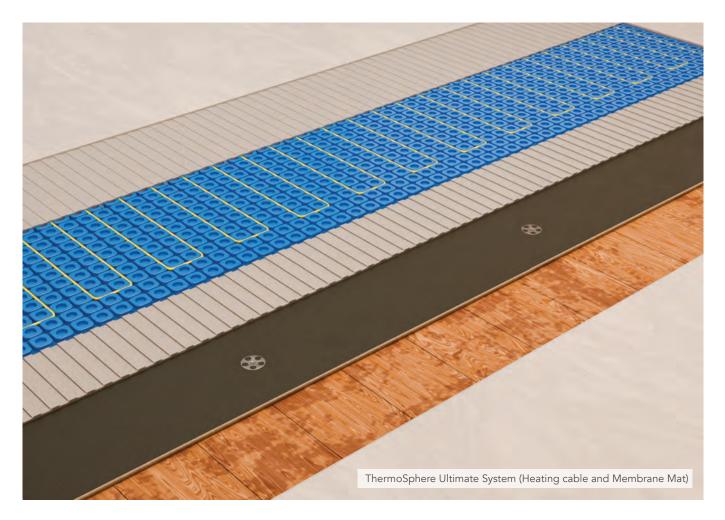
Electric Underfloor Heating Keeping your home warm

Don't want radiators to spoil the minimalist look you've created in your 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 on a cold morning.

Underfloor heating has lower running costs than traditional central heating systems, and is considered a more environmentally conscious way to heat your home.



Feel the warmth 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



Convection causes drafts and uneven heat spread

Underfloor heating system

- Even heat spread
- Comfortable room temperature
- eat No draughts
 - Warm floors



Even spread of heat for maximum comfort

Prices shown include VAT. All dimensions in millimetres.

Running Costs* Heated Area

Time (hours)	2m ²	4m ²	6m ²	10m ²	15m ²	20m ²
1	3р	5р	8p	13p	20p	27p
2	5р	11p	16p	27p	40p	54p
3	8p	16p	24p	40p	60p	80p
4	11p	21p	32p	54p	80p	107p
5	13p	27p	40p	67p	101p	134p
6	16p	32p	48p	80p	121p	161p
7	19p	38p	56p	94p	141p	188p
8	21p	43p	64p	107p	161p	215

*The example above is calculated based on an output of 150w/m² in a room that meets Building Regulations Part L. The cost of electricity is an average of 22p/kWh

Low Running Costs

Our underfloor heating offers many economical advantages for your home;

- 100% efficient, so every £spent is converted to heat
- Heats up quickly, on average 20-30 minutes
- Save energy by only heating the rooms you want by creating heating zones

Applications

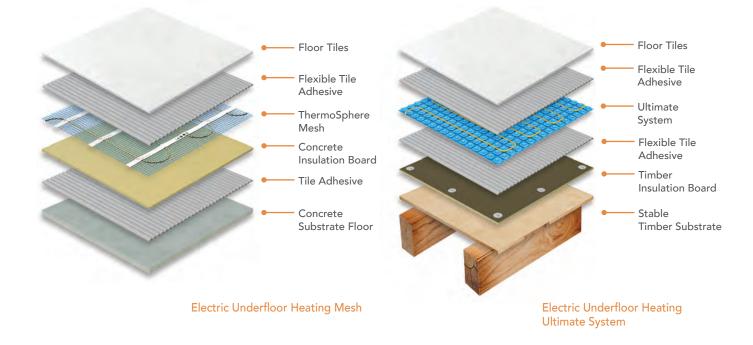
UFH products have a wide range of applications and can be installed on timber and concrete substrates.

Suitable for almost all floor finishes; here are some examples illustrating the composition.

What type of UFH do I require?

Product	Tiles	Stone	Laminate	Porcelain	Carpet
150W/m2 Mesh	٠	٠	٠	٠	•
200W/m2 Mesh	٠	٠	•	٠	•
Ultimate System	•	•			

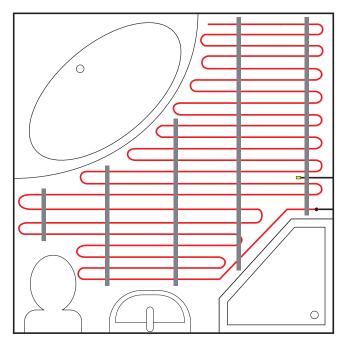
For small awkward areas and wet rooms, use Ultimate System. For regular areas 1-24m² use 150W/m² Mesh. For high output use 200W/m² Mesh.



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

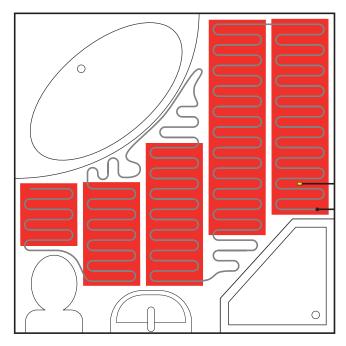
Cable Layout

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.



Installation

Efficient underfloor heating.

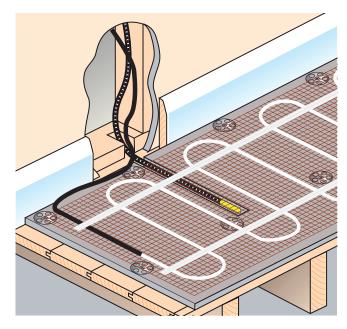
UFH mats can be laid onto any substrate and we always recommend that you lay them onto insulation board for maximum efficiency and potentially reduced running costs.

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

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

Conduit & Sensor Installation

Illustration of an insulated timber substrate.



Vastly Reduce Heat-Up Times

Floor construction and final finish will govern the heat up times.

Sufficient insulation will greatly reduce heat up times and you will notice the difference in your energy bills. A wellinsulated 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

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

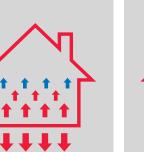




ThermoSphere Mesh with insulation in living room

Without Insulation

With Insulation



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

Prices shown include VAT. All dimensions in millimetres.



ThermoSphere Mesh - 150W/m2

Area (M²)	Code	Size (M)	Output (W)	Voltage (V)	Resistance (Ohms)	RRP
1.0	TSM-150-0100	2 x 0.5	150	230	353	£81.90
1.5	TSM-150-0150	3 x 0.5	225	230	235	£119.70
2.0	TSM-150-0200	4 x 0.5	300	230	176	£158.76
2.5	TSM-150-0250	5 x 0.5	375	230	141	£ 197.82
3.0	TSM-150-0300	6 x 0.5	450	230	118	£236.88
3.5	TSM-150-0350	7 x 0.5	525	230	101	£275.94
4.0	TSM-150-0400	8 x 0.5	600	230	88	£317.52
4.5	TSM-150-0450	9 x 0.5	675	230	78	£356.58
5.0	TSM-150-0500	10 x 0.5	750	230	71	£395.64
6.0	TSM-150-0600	12 x 0.5	900	230	59	£472.50
7.0	TSM-150-0700	14 x 0.5	1050	230	50	£551.88
8.0	TSM-150-0800	16 x 0.5	1200	230	44	£630.00
9.0	TSM-150-0900	18 x 0.5	1350	230	39	£708.12
10.0	TSM-150-1000	20 x 0.5	1500	230	35	£788.76
12.0	TSM-150-1200	24 x 0.5	1800	230	29	£943.74
14.0	TSM-150-1400	28 x 0.5	2100	230	25	£1099.98
16.0	TSM-150-1600	32 x 0.5	2400	230	22	£1257.48
20.0	TSM-150-2000	40 x 0.5	3000	230	18	£1562.40
24.0	TSM-150-2400	48 x 0.5	3600	230	15	£1874.88

Programmable Thermostat

SCP-W-01	
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White - Programmable Control / IP30 / Max Load 16A	£200.34
SCP-B-01	
Black - Programmable Control / IP30 / Max Load 16A	£200.34

- Improved 7 day 6 event schedule Ambient temperature sensor
- Manual temperature boost
- Available in Black or White
- Floor temperature sensor
- 85 x 85 x 46mm (31mm in wall)

Dual Control Thermostat

DC-W-01 White - Thermotouch Dual Control IP30 / Max Load 20A

- Ambient & floor sensors • Portrait & landscape mode
- Control a towel rail/mirror heater

£269.64

0 11

- 8 home screen colour options
- Dual Relay for 2 in 1 control • 129 x 88 x 48mm (31mm in wall)



Features 3.5mm TwistedTwin Cable

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

ThermoSphere Mesh - 200W/m2

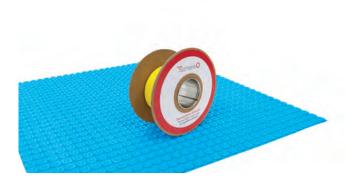
Area (M²)	Code	Size (M)	Output (W)	Voltage (V)	Resistance (Ohms)	RRP
1.0	TSM-200-0100	2 x 0.5	200	230	265	£95.76
1.5	TSM-200-0150	3 x 0.5	300	230	176	£131.04
2.0	TSM-200-0200	4 x 0.5	400	230	132	£173.88
2.5	TSM-200-0250	5 x 0.5	500	230	106	£211.05
3.0	TSM-200-0300	6 x 0.5	600	230	88	£253.26
3.5	TSM-200-0350	7 x 0.5	700	230	76	£295.47
4.0	TSM-200-0400	8 x 0.5	800	230	66	£337.68
4.5	TSM-200-0450	9 x 0.5	900	230	58	£379.89
5.0	TSM-200-0500	10 x 0.5	1000	230	53	£422.10
6.0	TSM-200-0600	12 x 0.5	1200	230	44	£506.52
7.0	TSM-200-0700	14 x 0.5	1400	230	38	£590.94
8.0	TSM-200-0800	16 x 0.5	1600	230	33	£675.36
9.0	TSM-200-0900	18 x 0.5	1800	230	29	£759.78
10.0	TSM-200-1000	20 x 0.5	2000	230	26	£844.20
12.0	TSM-200-1200	24 x 0.5	2400	230	22	£1,013.04





Φ

22°°





Uncoated Insulation Board

Code	Pack Size (Boards)	Depth (mm)	Size (m)	Board Area (m²)	RRP
CIB-006-01	1	6.0	1.2 x 0.6	0.72	£12.60
CIB-105-01	1	10.5	1.2 x 0.6	0.72	£16.38

ThermoSphere Ultimate - 230V

Area m² (130W)	Area m ² (195W)		Cable Length (m)	Output (W)	Resist- ance (Ohms)	RRP
1.15	0.77	HDMC-012-0150J	12.0	150	352	£88.20
1.73	1.15	HDMC-018-0225J	18.0	225	235	£131.04
2.31	1.54	HDMC-025-0300J	25.0	300	176	£175.14
2.88	1.92	HDMC-031-0375J	31.0	375	141	£217.98
3.46	2.31	HDMC-037-0450J	37.0	450	117	£262.08
3.90	2.60	HDMC-042-0525J	42.0	525	100	£294.84
4.62	3.08	HDMC-050-0600J	50.0	600	88	£349.02
5.10	3.40	HDMC-055-0675J	55.0	675	78	£385.56
5.77	3.85	HDMC-061-0750J	61.0	750	70	£435.96
6.92	4.62	HDMC-075-0900J	75.0	900	58	£522.90
8.32	4.99	HDMC-090-1080J	90.0	1080	48	£628.74
9.23	6.15	HDMC-100-1200J	100.0	1200	44	£698.04
11.54	7.69	HDMC-125-1500J	125.0	1500	35	£871.92
13.85	9.23	HDMC-150-1800J	150.0	1800	29	£1047.06
16.17	10.78	HDMC-175-2100J	175.0	2100	25	£1,222.20
18.46	12.31	HDMC-200-2400J	200.0	2400	22	£1396.08
			3 stud space	2 stud space		

Coated Insulation Board

Code	Pack Size (Boards)	Depth (mm)	Size (mm)	Board Area (m²)	RRP
TIB-006-01	1	6.0	1.2 x 0.6	0.72	£27.72
TIB-010-01	1	10.0	1.2 x 0.6	0.72	£30.24
TIB-012-01	1	12.0	1.2 x 0.6	0.72	£31.50
TIB-020-01	1	20.0	1.2 x 0.6	0.72	£35.28

Heating & Decoupling Membrane Mat

HDM-001 1m ² Decoupling Membrane 1m x 1m x 5.5mm	£31.37
HDM-005 5m ² Decoupling Membrane 5m x 1m x 5.5mm	£154.98
HDM-015 15m ² Decoupling Membrane 15m x 1m x 5.5mm	£453.60
HDM-SA-001 1m ² Self Adhesive Decoupling Membrane	
1m x 1m x 5.5mm	£40.32
HDM-SA-015 15m ² Self Adhesive Decoupling Membrane	
15m x 1m x 5.5mm	£585.90

Ultimate System

Add any cables to get required size • Zero maintenance • Simple installation • Fully earthed • Cost effective

Mesh 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