

# Electric Underfloor Heating

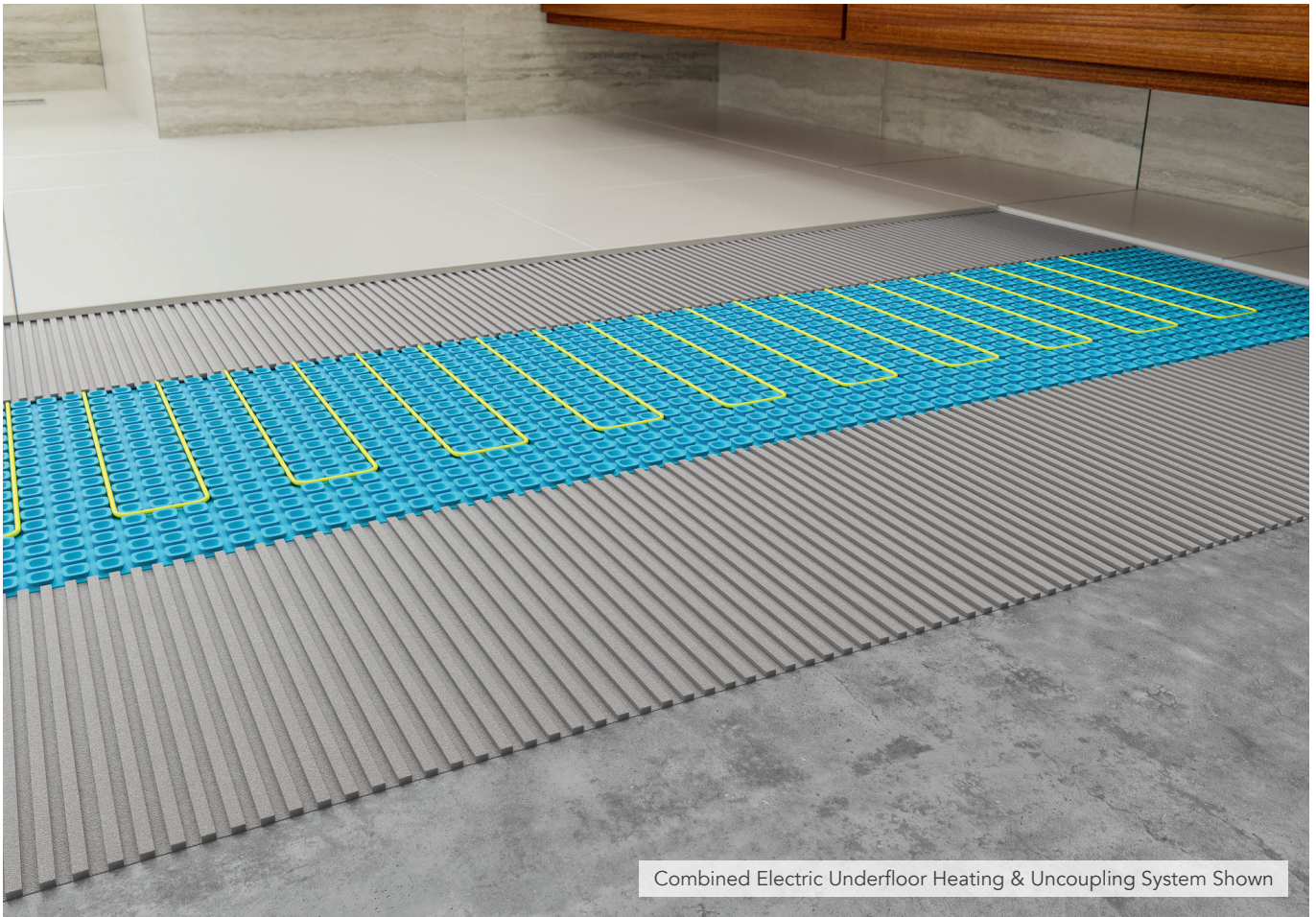
## Keeping your home warm

**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.





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.

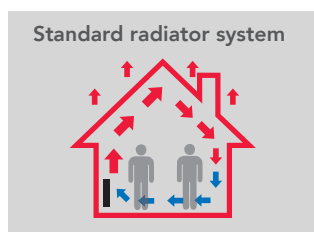
## Benefits

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

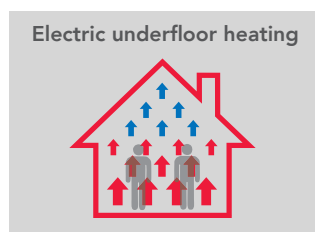
- Heat rises from floor to ceiling
- Heat loss through roof
- Creates draughts and uneven heat
- Cold floors and hot heads



Convection causes drafts and uneven heat spread

### Underfloor heating system

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



Even spread of heat for maximum comfort

### Running Costs\* Heated Area

Time (hours)	1m <sup>2</sup>	2m <sup>2</sup>	4m <sup>2</sup>	5m <sup>2</sup>	10m <sup>2</sup>	15m <sup>2</sup>	25m <sup>2</sup>
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/m<sup>2</sup> in a well insulated environment and an electricity tariff of 28p/kWh

## Low Running Costs

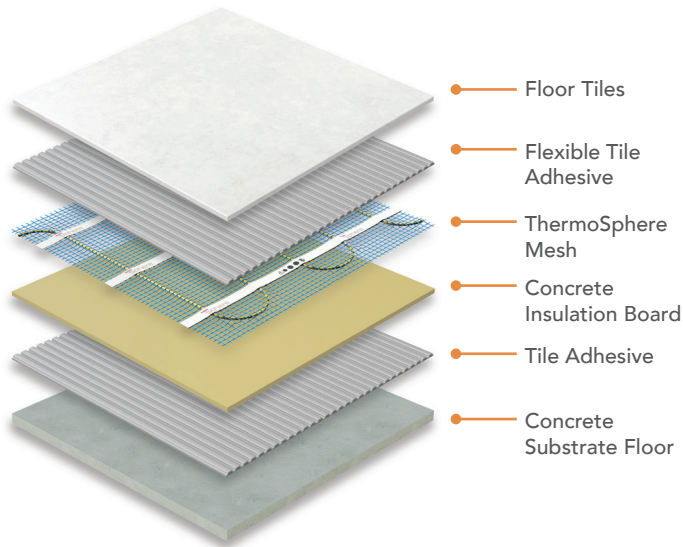
Our underfloor heating offers many economical advantages for your home;

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

## 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.



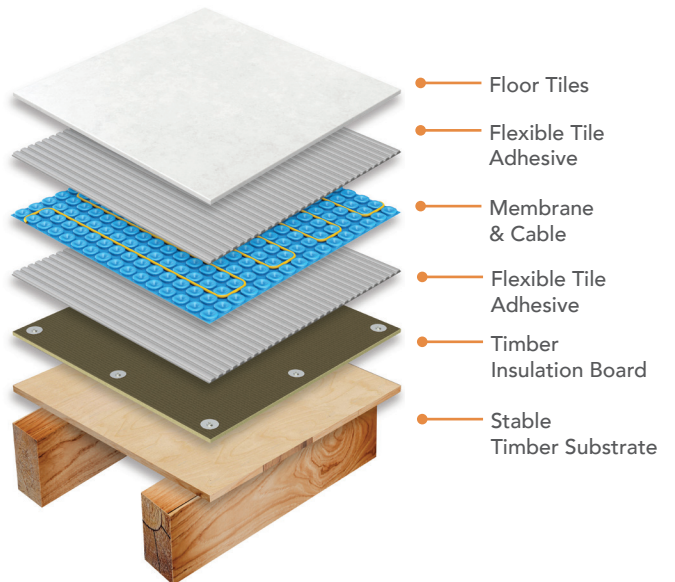
Electric Underfloor Heating Mesh

## 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 and wet rooms, use Membrane and cable.

For regular areas 1-24m<sup>2</sup> use 150w/m<sup>2</sup> mat. For high output use 200w/m<sup>2</sup> mat.



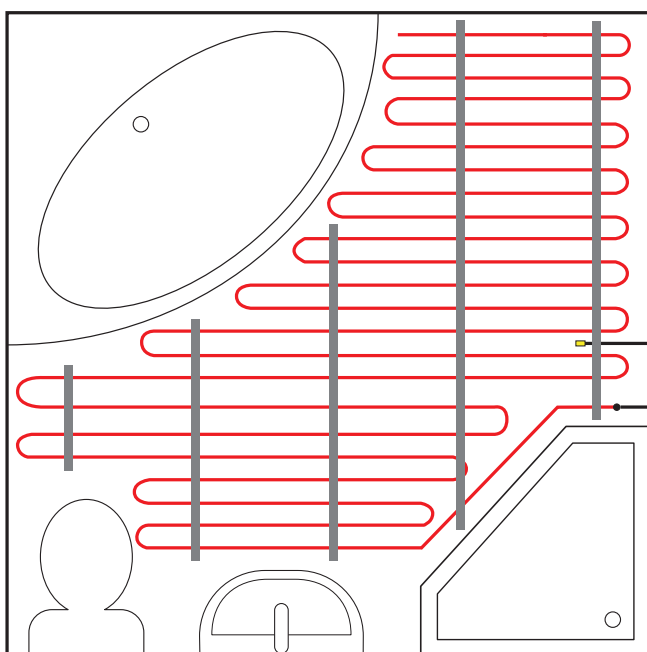
Combined Underfloor Heating & Uncoupling System

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

## Cable Layout

Simple installation in irregular areas

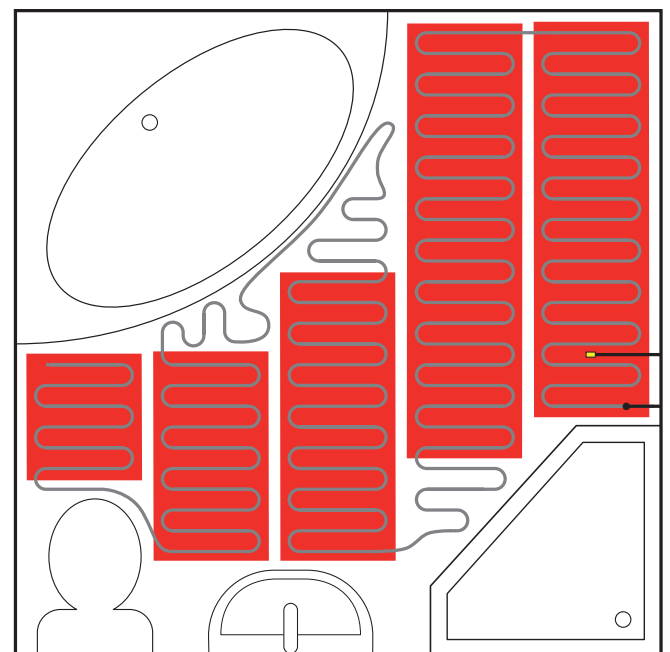
Diagram below shows a typical bathroom layout.



## Mat System Layout

Simple, flexible installation

Diagram below shows a typical bathroom layout.



## Installation

Efficient underfloor heating.

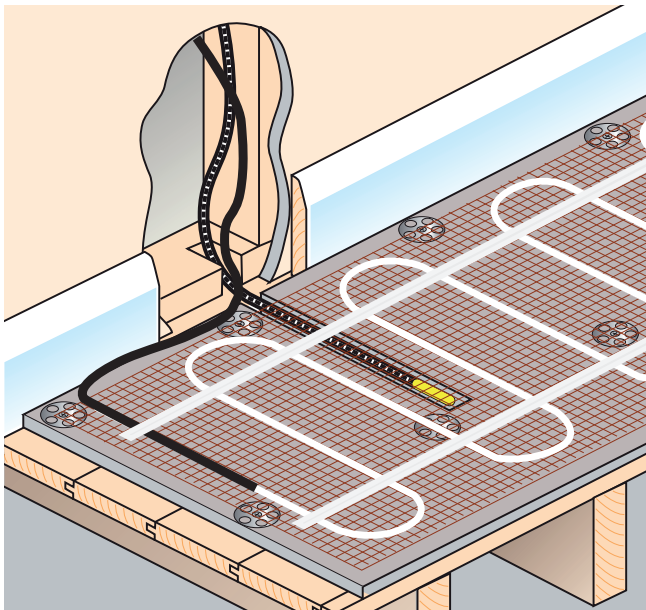
UFH mats can be laid onto any substrate and we always recommend that you lay them onto insulation board for maximum efficiency and potentially reduced running costs.

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

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

## Conduit & Sensor Installation

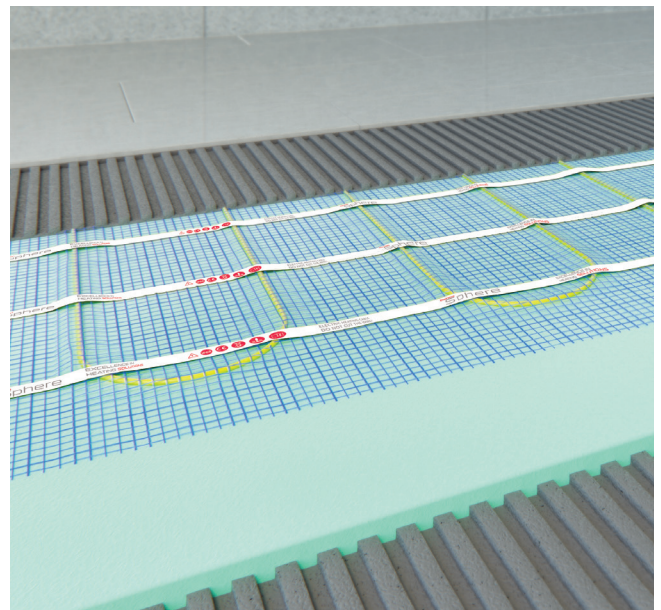
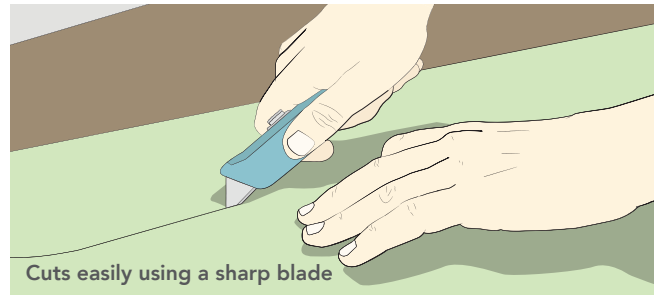
Illustration of an insulated timber substrate.



For use with timber substrates



For use with concrete substrates



## Vastly Reduce Heat Up Times

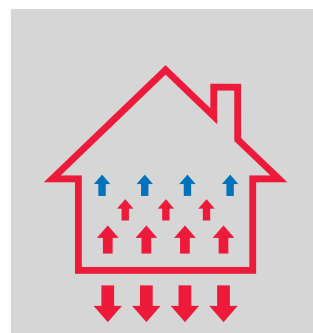
Floor construction and final finish will govern the heat up times.

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

Prices shown include VAT. All dimensions in millimetres.

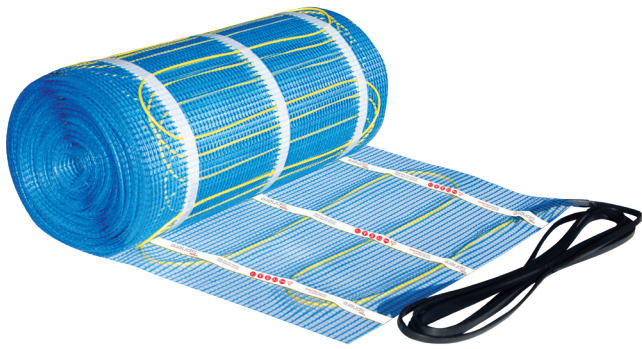
Without Insulation



With Insulation



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



**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 - 150W/m2 Heating Mat**

Code	Mat/Cable Length	Output (W)	Area (M <sup>2</sup> )	Voltage (V)	Resistance (Ohms)	RRP
TSM-150-0100	2.0	150	1.0	230	353	£78.00
TSM-150-0150	3.0	225	1.5	230	231	£114.00
TSM-150-0200	4.0	300	2.0	230	176	£151.20
TSM-150-0250	5.0	375	2.5	230	141	£188.40
TSM-150-0300	6.0	450	3.0	230	118	£225.60
TSM-150-0400	8.0	600	4.0	230	88	£302.40
TSM-150-0500	10.0	750	5.0	230	70	£376.80
TSM-150-0600	12.0	900	6.0	230	59	£450.00
TSM-150-0800	16.0	1200	8.0	230	44	£600.00
TSM-150-1000	20.0	1500	10.0	230	35	£751.20
TSM-150-1200	24.0	1800	12.0	230	29	£898.80

**ThermoSphere Mesh - 200W/m2 Heating Mat**

Code	Mat/Cable Length	Output (W)	Area (M <sup>2</sup> )	Voltage (V)	Resistance (Ohms)	RRP
TSM-200-0100	2.0	200	1	230	265	£91.20
TSM-200-0150	3.0	300	1.5	230	176	£124.80
TSM-200-0200	4.0	400	2	230	132	£165.60
TSM-200-0250	5.0	500	2.5	230	106	£201.00
TSM-200-0300	6.0	600	3	230	88	£241.20
TSM-200-0400	8.0	800	4	230	66	£321.60
TSM-200-0500	10.0	1000	5	230	53	£402.00
TSM-200-0600	12.0	1200	6	230	44	£482.40
TSM-200-0800	16.0	1600	8	230	33	£643.20
TSM-200-1000	20.0	2000	10	230	27	£804.00
TSM-200-1200	24.0	2400	12	230	22	£964.80

**Programmable Thermostat**

SCP-W-01 White - Programmable Control	£190.80
SCP-B-01 Black - Programmable Control	£190.80

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

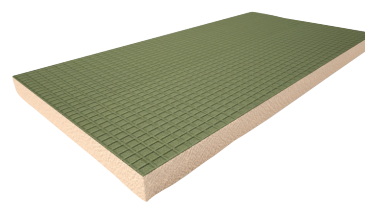
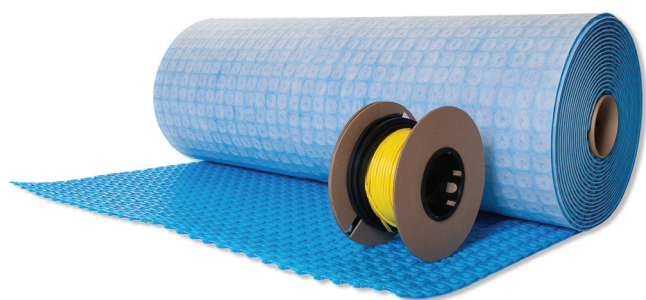


**Dual Control Thermostat**

DC-W-01 White - Thermotouch Dual Control	£256.80
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- Ambient & floor sensors
- Dual Relay for 2 in 1 control
- Portrait & landscape mode
- Control a towel rail/mirror heater
- Available in White
- 8 home screen colour options





### Uncoated Insulation Board

Code	Pack Size (Boards)	Thickness (mm)	Board Size (mm)	Board Area (M <sup>2</sup> )	Pack Area (M <sup>2</sup> )	RRP
CIB-006-20	20	6	1.2 x 0.6m	0.72	14.4	£212.16
CIB-105-10	10	10.5	1.2 x 0.6m	0.72	7.2	£163.20

### ThermoSphere Ultimate - 230V

Code	Cable Length (M)	Output (W)	Area (130W M <sup>2</sup> )	Area (195W M <sup>2</sup> )	Resistance (Ohms)	RRP
HDMC-012-0150J	12.0	150	1.15	0.8	352.7	£84.00
HDMC-018-0225J	18.0	225	1.73	1.15	235.1	£124.80
HDMC-025-0300J	25.0	300	2.31	1.5	176.3	£166.90
HDMC-031-0375J	31.0	375	2.88	1.9	141.1	£207.60
HDMC-037-0450J	37.0	450	3.46	2.3	117.6	£249.60
HDMC-042-0525J	42.0	525	4.0	2.6	100.8	£280.80
HDMC-050-0600J	50.0	600	4.62	3.1	88.2	£332.40
HDMC-055-0675J	55.0	675	5.2	3.4	78.4	£367.20
HDMC-061-0750J	61.0	750	5.77	3.9	70.5	£415.20
HDMC-075-0900J	75.0	900	6.92	4.6	58.8	£498.00
HDMC-090-1080J	90.0	1080	8.3	4.9	48.9	£598.80
HDMC-100-1200J	100.0	1200	9.23	6.2	44.1	£664.80
HDMC-125-1500J	125.0	1500	11.54	7.7	35.3	£830.40
HDMC-150-1800J	150.0	1800	13.85	9.2	29.4	£997.20
HDMC-175-2100J	175.0	2100	16.1	10.78	25.2	£1,164.00
HDMC-200-2400J	200.0	2400	18.46	12.31	22.0	£1,329.60

3 stud space    2 stud space

### Coated Insulation Board

Code	Pack Size (Boards)	Thickness (mm)	Board Size (mm)	Board Area (M <sup>2</sup> )	Pack Area (M <sup>2</sup> )	RRP
TIB-006-08	8	6	1.2m x 0.6m	0.72	5.76	£319.20
TIB-010-06	6	10	1.2m x 0.6m	0.72	4.32	£234.00
TIB-012-06	6	12	1.2m x 0.6m	0.72	4.32	£225.60
TIB-020-06	6	20	1.2m x 0.6m	0.72	4.32	£264.00
TIB-030-04	4	30	1.2m x 0.6m	0.72	2.88	£203.52
TIB-040-03	3	40	1.2m x 0.6m	0.72	2.16	£177.60
TIB-050-02	2	50	1.2m x 0.6m	0.72	1.44	£125.76

### Heating & Decoupling Membrane Mat

HDM-001	1 x 1	£29.88
HDM-005	5 x 1	£147.60
HDM-015	15 x 1	£432.00
HDM-SA-001	1 x 1 (Self Adhesive)	£38.40
HDM-SA-015	15 x 1 (Self Adhesive)	£558.00

### 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