

thermo

Sphere 

Leading the charge for electric heating

Explore the range





**Comfort that
doesn't compromise
the environment.**

Floor heating	6
Mesh (Tile Stone)	8
ThermoSphere Ultimate® (Tile Stone)	10
Membrane Mat (Tile Stone)	11
Foil (Wood Carpet Vinyl)	12
Screed Cable	14
Floor heating accessories	15
Heating control	16
SmartHome	18
Bluetooth	20
Programmable	22
Dual Control	24
Bathroom	26
Towel Bars	28
Towel Rails	30
Mirror Demisters	32
Room heating	34
Oil Filled Radiator	36
Glass Panel Heater	37
Convactor Panel Heater	38
Water heating	40
Electric Flow Boiler	42
Micro Electric Boiler	43
Driveway heating	44
Warranty & technical information	46
Training	64
Installer programme	65



Leading the charge

The race to reduce our carbon emissions is on and that means we need to change how we heat homes.

We're a British-based manufacturer and we have been designing electric heating systems since 1998. By combining our expertise in electric heating and drive for technological innovation, we deliver a range of smart, energy-efficient, and eco-friendly electric heating systems which help transform living spaces that are naturally better by design.

Fundamentally, we believe that comfort doesn't need to cost the Earth.

Why electric heating?

- ✓ 100% efficient at point of use. Every pound spent is converted into heat.
- ✓ Doesn't produce harmful carbon emissions at point of use which is why it is often referred to as a cleaner way to warm homes.
- ✓ Much easier to specify, install and use.
- ✓ Ideal for new build and retrofit projects and most electric heating systems can be installed by a competent DIYer.
- ✓ With less moving parts than other types of heating systems, there's almost zero maintenance.

For a better future

We're not only committed to leading the charge in changing the way homes are heated, we're committed to continuing to reduce our operational impact on the environment.

One of the biggest changes that you'll see is all of our product packaging. We've ditched unnecessary plastic, printing and lamination, switching to recyclable and compostable card. This is all part of our environmental pledge and our journey towards being 100% plastic packaging free!

The invisible heating system that warms any room and works under any floor finish.

Floor heating

Made in the South East, not the Far East

Suitable for new build or retrofit projects, electric underfloor heating is a practical and energy-efficient way to transform any living space.

You'll find that each ThermoSphere system has been purposefully designed to be easy to specify, install and use, whilst backed by a comprehensive lifetime warranty.

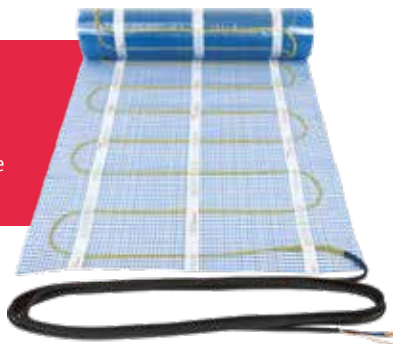
Why electric underfloor heating?

- ✓ 100% efficient - Every pound you spend running the system is converted to heat, right where it is needed.
- ✓ Heats up quickly - On average, it only takes between 20 to 30 minutes to heat the room to the desired temperature.
- ✓ Easy to install - Any competent DIYer can install it. But get a Part P registered electrician to connect it to the mains.
- ✓ Conserve energy - By creating heating zones you'll conserve energy because you are only heating up the room you want.
- ✓ Design freedom - With no radiators on walls, there's no limits on where you can place furniture, giving more design freedom.
- ✓ Low maintenance - When installed correctly, electric underfloor heating requires zero maintenance.

Mesh



The versatile system that can be installed under most floor types. Primarily designed for tile and stone. Easily adaptable for vinyl, carpet and timber.



- ✓ Made in Great Britain.
- ✓ Sticks wire-side-down to protect the heating cable during installation.
- ✓ Bespoke low outputs made to order.

100W/m²

Ideal for larger, well-insulated and frequently used rooms that require warmth for most of the day.

150W/m²

The most popular option made to maintain a comfortable temperature in rooms with a small amount of heat loss.

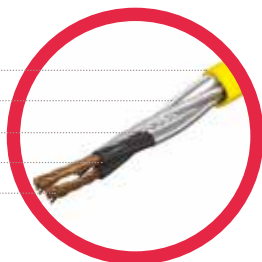
200W/m²

Maintains a comfortable temperature in higher heat loss rooms such as conservatories. Also great for rooms that require short bursts of heat and a faster heat up time.

Reducing the risk of cable failure

ThermoSphere Mesh is the only underfloor heating mat system in the UK to feature a unique TwistedTwin heating cable, which reduces the risk of cable failure.

- PVC (HR105) outer insulation
- Continuous aluminium earth sheath
- Tin plated drain wire
- FEP inner insulation
- Stranded copper conductors

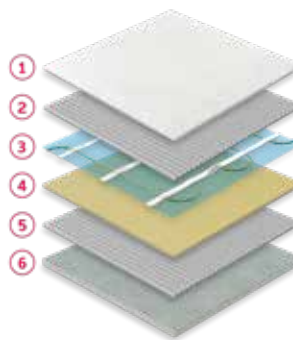


Use for walls, not just floors

ThermoSphere Mesh is so versatile, you can even add extra comfort by installing it under wall tiles in wet rooms and shower cubicles.

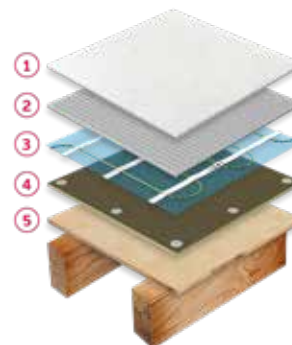


Typical build up for concrete substrate



1. Tile
2. Flexible tile adhesive
3. Mesh
4. Uncoated insulation board
5. Flexible tile adhesive
6. Concrete substrate

Typical build up for timber substrate



1. Tile
2. Flexible tile adhesive
3. Mesh
4. Coated insulation board
5. Timber substrate



Fully self-adhesive



TwistedTwin cable



Low profile



Cable protection

Technical details

Voltage	230V AC 50Hz
Mat width	500mm
Mat thickness	3.5mm
Element insulation	FEP and PVC (HR105)
Output	100 / 150 / 200W/m ²
Cold tail length	5m
Mat sizes	1m ² - 24m ²

LIFETIME WARRANTY

TWISTED TWIN TECHNOLOGY



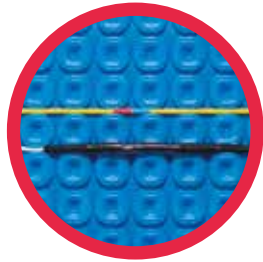
ThermoSphere Ultimate®

The first electric heating cable with guaranteed reliability. Works with all types of membrane mats for projects with tile or stone floor finishes.



- ✓ Manufactured without bulky cold tail joints to cut in.
- ✓ The first heating cable to combine TwistedTwin construction with in-line joint technology.
- ✓ Four new cable sizes reducing the need to use multiple cables on a project. Each size comes with a 2m cold tail.

Reducing risk of accidental damage



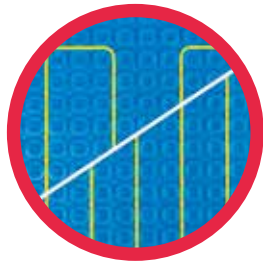
With one thickness from end-to-end, there's no risk of damaging the cable when cutting in a bulky cold tail joint. It's a one-step process: simply press in and you're done!

Use with any type of membrane mat

It's so versatile which means you can use your preferred brand of decoupling mat with the only cable that comes with guaranteed reliability.



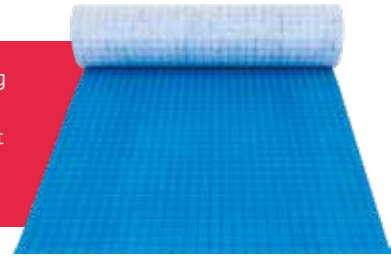
Flexibility of heating output



When used with ThermoSphere's Membrane Mat, you can decide two cable layouts to achieve your ideal heat. 130W/m² using 3-stud spacing and 195W/m² using 2-stud spacing.

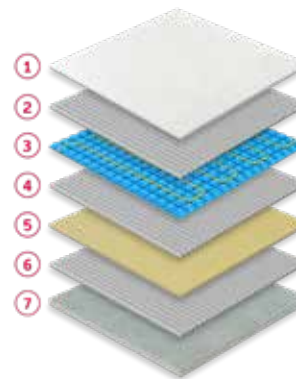
Membrane Mat

The decoupling, waterproofing and load bearing properties protect tile and stone floors. It also works with most popular heating cables.



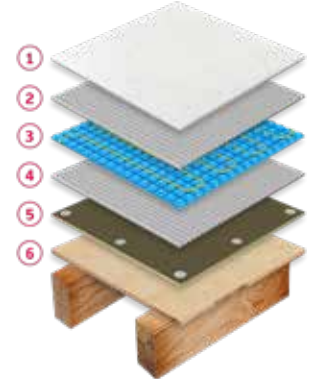
- ✓ Protects tile and stone floors from stress cracks and provides a waterproofing layer. Perfect for wet room projects.
- ✓ Only 5.5mm thick to reduce impact on floor build ups.
- ✓ Available with a fleece or self-adhesive backing.

Typical build up for concrete substrate



1. Tile 2. Flexible tile adhesive 3. Membrane 4. Flexible tile adhesive 5. Uncoated insulation board 6. Flexible tile adhesive substrate 7. Concrete substrate

Typical build up for timber substrate



1. Tile 2. Flexible tile adhesive 3. Membrane 4. Flexible tile adhesive 5. Coated insulation board 6. Timber substrate

Technical details

Voltage	230V AC 50Hz
Mat width	1,000mm
Mat thickness	5.5mm
Cable insulation	FEP and PVC (HR105)
Output	130 / 195W/m ²
Cable length	12 to 200m
Protection rating	IP68

LIFETIME
WARRANTY

TWISTED TWIN
TECHNOLOGY



Foil

Designed to provide the perfect level of warmth without overheating, warping or distorting soft floor finishes such as wood, carpet or vinyl.



- ✓ 140W/m² output.
- ✓ Unique accessible cable loops make cut and return installation quick and easy.
- ✓ The complete Foil build up provides 19dB impact sound reduction.

It's the full package!

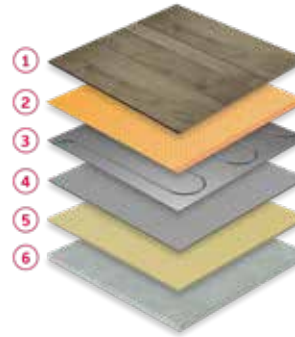
If you like convenience, you can buy a complete kit from your local ThermoSphere retailer. The kit includes everything you need; 140W/m² ThermoSphere Foil, underlay and our unique cushioning and acoustic overlay. This combination only adds 9mm to the floor build up too!



Impact sound reduction

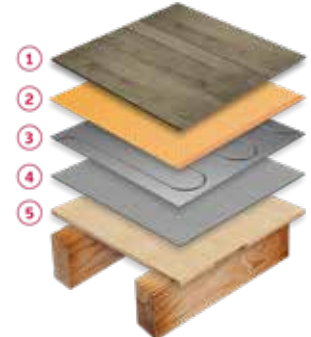
One of the most common paths of noise is hard floors such as timber. This is particularly significant in blocks of flats where hearing your neighbour's footsteps is not uncommon. The combination of the 2mm cushioning overlay and 5mm cushioning underlay provides 19dB impact sound reduction.

Typical build up for concrete substrate



1. Engineered timber floor
2. Cushioning overlay
3. Foil
4. Cushioning underlay
5. Uncoated insulation board
6. Concrete substrate

Typical build up for timber substrate



1. Engineered timber floor
2. Cushioning overlay
3. Foil
4. Cushioning underlay
5. Timber substrate

Typical build up for carpet floor finish



1. Carpet
2. Carpet underlay
3. HDF overlay
4. Cushioning overlay
5. Foil
6. Cushioning underlay
7. Timber substrate

Typical build up for bonded timber floor



1. Bonded timber
2. Acrylic adhesive
3. Cement board overlay
4. Cushioning overlay
5. Foil
6. Cushioning underlay
7. Timber substrate

Technical details

Voltage	230V AC 50Hz
Mat width	500mm
Mat thickness	2mm
Element insulation	FEP
Output	140W/m ²
Cold tail length	5m
Sizes	1m ² - 12m ²

LIFETIME WARRANTY

UNIQUE EARTH PROTECTION

LOW PROFILE

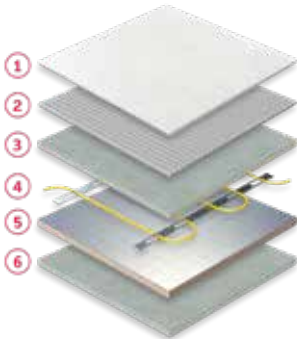
Screed Cable

Ideal for new build or renovation projects where floor height is not an issue and for rooms which are in almost constant use.



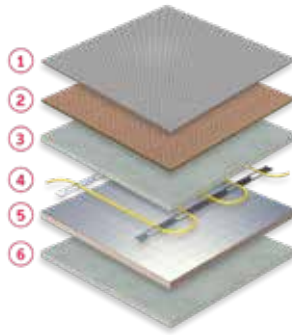
- ✔ Designed for use in 40mm - 100mm depth of all types of sand and cement, anhydrite and flow screeds.
- ✔ TwistedTwin cable construction for increased durability.
- ✔ Rated at 18W/LM and dependent on cable spacing, it can be used as a primary or secondary heat source.

Typical build up for tile floor finish



1. Tile
2. Flexible tile adhesive
3. Flow screed
4. Screed cable
5. Foil faced insulation
6. Concrete substrate

Typical build up for carpet floor finish



1. Carpet
2. Carpet underlay
3. Flow screed
4. Screed cable
5. Foil faced insulation
6. Concrete substrate

Technical details

Voltage	230V 50Hz
Total thickness	5mm
Protection rating	IP68
Element insulation	FEP and PVC (HR105)
Output	Variable
Cold tail length	5m
Sizes	1m ² - 10m ²

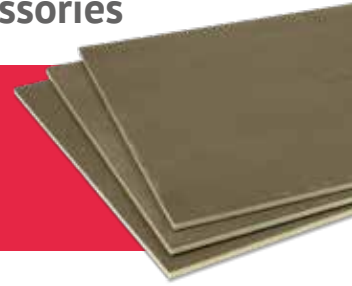
LIFETIME
WARRANTY

TWISTED TWIN
TECHNOLOGY



Floor heating accessories

Underfloor heating accessories are specifically designed to increase efficiency of the system so that comfort levels are maintained with ease.



- ✔ Improve efficiency by up to 50% by simply including a 10mm layer of insulation board.
- ✔ Create the perfect wet room by combining ThermoSphere Membrane with premium tanking accessories.
- ✔ Control large heating systems which exceed 16A with one thermostat by adding a contactor snubber.

Insulation boards boost system efficiency

There are two types of insulation boards from ThermoSphere. These are **Uncoated Insulation Boards** used for concrete and screed substrates and there are **Coated Insulation boards** which add rigidity, strength and thermal insulation to timber substrates.



Uncoated Insulation Boards




Coated Insulation Boards

Do you need a snubber?

If the total load of your electric underfloor heating system exceeds 16A, you won't be able to control it from a single thermostat, unless you use a contactor snubber.

For a full list of the accessories available from ThermoSphere, ask at the counter of your local retailer or contact us directly.





We've made
controlling comfort
simple. Each design
is made to be easy to
install and use.

Heating control

Environmentally and, just as importantly, user friendly

The way to improve system efficiency and reduce energy bills all with easy control from the comfort of your own phone.

Our range contains everything from the fastest way to set up dynamic heating schedules, to the easiest way to control underfloor heating plus another heating appliance with one thermostat.

Benefits of ThermoSphere's thermostats

- ✓ Great options - From simple programmable to smart, choose a thermostat to fit your lifestyle.
- ✓ Set up fast - If speed matters, you'll be pleased to know that you can set up heating schedules in under 60 seconds.
- ✓ Monitor energy use - Intelligently track and monitor your energy use and start reducing your energy bills.
- ✓ Access anywhere - If you're not at home, don't worry. Control your heating just by using your smartphone.
- ✓ Control two appliances - Control your electric underfloor heating and towel bars, towel rails or a mirror demister with one thermostat.
- ✓ Your peace of mind - Each thermostat comes with a comprehensive warranty backed by five-star support.

SmartHome

Control from anywhere. Improve system efficiency and reduce energy bills all with easy control from the comfort of your own phone.



- ✓ Build an intelligent and comfortable heating schedule from your phone and control from anywhere.
- ✓ Identify opportunities to save energy with the energy monitor.
- ✓ Compatible with Amazon Alexa and Google Home for voice control.
- ✓ Full colour display and simple language menus make it easy to set up and use.

A true smart home experience

If you are looking for an underfloor heating thermostat with all the bells and whistles, then the SmartHome Thermostat could be just for you. It's jam-packed full of energy saving features which makes it easier to control your heating in a simple and more efficient way, whilst saving you money in the long-run.

The SmartHome Hub (SHH-01) is essential for wireless connectivity and enables a true smart home experience. You can connect up to 20 thermostats per hub and you can control up to 10 hubs via your smartphone.



Easy heating control and flexibility with the ThermoSphere app

The ThermoSphere app lets you build an intelligent and comfortable heating schedule for your home easily.



Energy use tracking

Identify the best times and opportunities where you could be saving energy, and reducing your heating bill by measuring energy use.



Geofencing

Your heating will be on when you're at home and off when you're not, with a simple radius perimeter setting around the home.



Weather compensation

Uses real time data to adjust the heating accordingly. If it's warm, then it will adjust a couple of degrees to ensure comfort and save energy.



Voice control

Compatibility with Amazon Alexa and Google Home allows you to control your electric underfloor heating with your voice.



Use the app to control more

Control lamps, chargers and more by using the ThermoSphere app with the SmartHome Plug. It's easy to connect and ensures total and simple control all in one place.



Bluetooth Programmable (BT21)

The fastest, simplest and easiest thermostat to set up with Bluetooth programming. Manually use the dial to control the temperature and let the app handle the rest.



- ✓ Use the BT21 as a simple manual control or unlock the full functionality with the app.
- ✓ Works with building management systems (BMS).
- ✓ Compatible with all popular sensor types making replacing existing thermostats with the BT21 easy.



A thermostat with a difference

At first glance the BT21 could be mistaken for a manual thermostat but there is much more to it than meets the eye.

The manual dial is used to adjust the temperature of the Eco and Comfort modes and everything else is done on the app! When using the app, you'll be able to create heating schedules in under 60 seconds as well as adjusting all settings easily without navigating through complicated menus.



The power of Bluetooth connectivity

Unlike thermostats that rely on Wi-Fi signal, you'll have peace of mind knowing that the BT21 uses Bluetooth connectivity. It also means you don't waste time remembering passwords.

There's no need to buy any additional equipment like a hub which not only saves money but also means you can just connect and go!



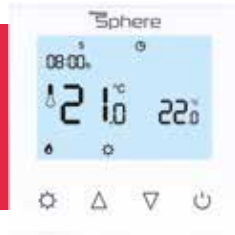
Wireless Temperature and Humidity Sensor

For remote ambient temperature applications and for use with domestic driveway heating systems. Comes with a replaceable battery.



Programmable

Simple, efficient heating control. Our entry level programmable thermostat. Get the most out of your heating by creating a heating schedule that suits you.



- ✔ Specially designed for accurate control of electric underfloor heating systems.
- ✔ Built-in ambient temperature sensor and external floor sensor.
- ✔ Design an economical heating schedule for your underfloor heating that fits your lifestyle.
- ✔ Boost the temperature manually until the next scheduled heating event.



Underfloor heating checklist

There are 6 key questions that need answering before buying your electric underfloor heating system (mat and thermostat).

1. Which insulation board do you need for your substrate?

Coated Uncoated
 (For wood) (For concrete)

2. What floor finish will you be installing?

Tile or stone Wood, carpet or vinyl
 (Mesh or Membrane) (Foil)

3. How much underfloor heating do you need?

Floor area (m²) - Area taken by fixed units (m²) = Total (m²)

4. How many bags of self-levelling are needed?

(Required for non-tile finishes & 10mm depth)

$\frac{\text{Floor area (m}^2\text{)} \times 1.8 \times \text{Depth (mm)}}{25} = \text{No. of bags}$

5. What type of thermostat would you like?

Manual Programmable
 Bluetooth SmartHome

6. What is the load of the underfloor heating system?

$\frac{\text{Heated area (m}^2\text{)} \times \text{Wattage of cable (W/m}^2\text{)}}{230} = \text{Load (A)}$

Important:

If the load of the underfloor heating circuit exceeds the maximum load of the thermostat (16A), but you want to control it from a single thermostat, then you must install a suitably rated contactor/snubber.

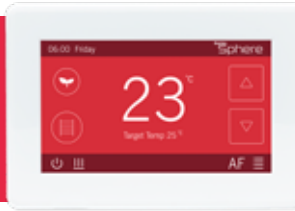
Need help with measuring up your next project?

Call: 0800 019 5899



Dual Control

Control more with one thermostat. Control two electric heating appliances with one unique programmable thermostat.



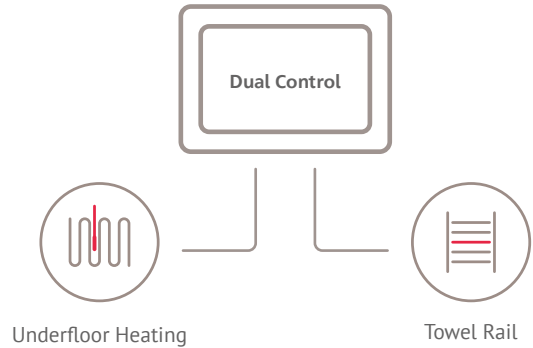
- ✓ Easy touchscreen display makes scheduling simple and easy to use and control.
- ✓ Install as either landscape or portrait and choose from eight coloured backgrounds.
- ✓ Learns how long your floor takes to heat up and reduces energy consumption.
- ✓ Open window and door detection helps to reduce energy waste.

Double the capability

The Dual Control Thermostat (available in both black and white) is made to be different. It gives you the ability to set a heating schedule for your floor and for the towel bar (or mirror demister). This is due to the independently switched dual relays inside. One is a 16 amp relay for the electric underfloor heating and the other is a 5 amp relay for an electric towel bar or mirror demister.



One thermostat for two heating appliances.



Welcome to a world of smart energy saving features and more



Total convenience

Control electric underfloor heating and another heating appliance, like a towel bar.



Energy saving

Smart adaptive start learns how long your floor takes to heat up and reduces energy consumption.



Clever monitoring

Open window sensor monitors the room temperature and switches off automatically if a window or door is opened.



Match your style

You can install the Dual Control thermostat as either landscape or portrait and choose from eight coloured backgrounds.

50%

**more energy-efficient
than traditional
towel bars.**



Bathroom

So stylish, it's a shame to cover them with a towel

The bathroom collection offers that little bit extra. From the ultra-energy-efficient electric towel bar collection that's beautifully designed and perfectly finished in Great Britain, to the luxury of steam-free mirrors.

No matter your style, this collection has something for everyone.

The benefits of the collection

- ✓ Ease of installation - Made simple with patented technology, which includes our towel bar Mounting System.
- ✓ Superior efficiency - The electric towel bar collection is 50% more energy-efficient than traditional towel bars.
- ✓ Extra safe - Low voltage 12V SELV elements provide extra safety which means you can install anywhere.
- ✓ Premium finishes - Choose from six premium finishes which come as standard.
- ✓ Unique technology - Self-regulating technology limits maximum temperature without compromising comfort.
- ✓ Large selection - A comprehensive range with a variety of styles to match your vision.

Towel Bars

Beautiful, practical and safe. The most efficient, technically advanced and perfectly finished electric towel bars available.

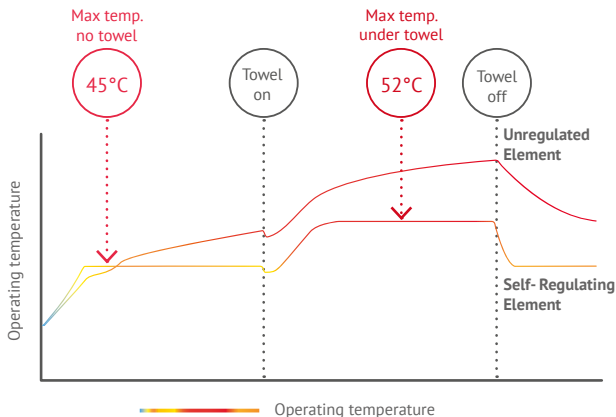


- ✓ Patented self-regulating heating elements use 50% less energy than traditional versions.
- ✓ Made from high quality 304 grade stainless steel and finished in Great Britain.
- ✓ 12V SELV ensures safe installation anywhere in the bathroom.
- ✓ Easily installed with the patented Mounting System.

Unique self-regulating, energy-efficient heating element

All of our heated towel bars feature a smart, patented self-regulating element. This heating technology limits the maximum temperature which means that it maintains the ideal operating temperature with minimal energy use. There's also no risk of over heating as the temperature is constantly maintained.

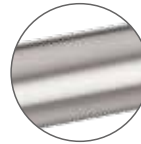
The graph below shows the real difference between a towel bar with an unregulated element and a self-regulating element.



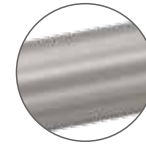
Two profiles, single mount or double mount



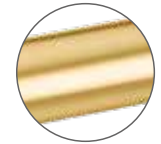
Six beautiful premium finishes which come as standard



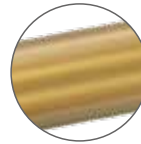
Diamond Polished
Stainless Steel



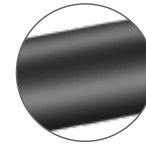
Brushed Stainless
Steel



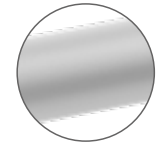
Diamond Polished
Brass



Brushed Brass



Matt Black



Matt White

Patented mounting system for an easy install

If you are planning on installing multiple towel bars, we always recommend using our patented towel bar Mounting System. It combines effortless levelling and alignment with superior cable management.

It's fitted behind the tile layer to ensure a stylish finish which creates an eye-catching design statement in the bathroom.



Towel Rails

Independent from central heating, these practical electric towel rails ensure warm and dry towels all throughout the year.



- ✓ A stylish range of designs and profiles including round, square and curved.
- ✓ Totally dry electric element. No need for any filling, pipe work or plumbing.
- ✓ Easy to install with our unique multi-flex wiring.
- ✓ Made from the highest quality 304 grade stainless steel.

No plumbing. No problem

The electric towel rail collection contains a stunning range of towel rail designs so it's easy to find the perfect match for any style of bathroom. They are a convenient option if there is no plumbing in place for a hydronic rail. The dry electric element heats up quickly and can be controlled independently from the central heating providing warm towels all year round.

Match your design

All stocked towel rails are finished as polished steel. However, if you are looking for a towel rail to match your brassware, our special finishes service can do just that. This service is offered for a quantity of 50 and above.



Designs to suit all types of projects



HTR-R-1120400



HTR-R-1120530



HTR-R-0700530



HTR-SS-0800600



HTR-RC-0800600



Range of designs

includes a stylish range of profiles and designs including square, round and curved.



No extras needed

There's no need for any additional pipe work or plumbing as each rail has a dry electric element.



Fast to install

No matter what towel rail you choose, each one comes with multi-flex wiring points found at each mounting leg to speed up installation.



Built to last

304 grade stainless steel is used to manufacture the towel rails which means that they last longer compared to others.

Mirror Demisters

Steam-free without compromise. Add a touch of luxury and experience clear mirrors straight after a hot shower or bath.



- ✓ Fully self-adhesive backing, making installation easy. Simply peel back and stick onto the back of any bathroom mirror.
- ✓ Low wattage outputs for energy-efficiency with maximum performance.
- ✓ Available in rectangular, circular and oval shapes.

Get rid of steam for good

Upgrade a standard bathroom mirror by installing a ThermoSphere Mirror Demister. Imagine no more wiping away condensation, just a steam and smudge-free mirror, as soon as you get out of the bath or shower. It provides a cost-effective luxury upgrade for any mirror in any home.



Easy to install

Simply fix to the back of the mirror with the self-adhesive backing and connect the lighting circuit or a Dual Control thermostat.



Energy efficient

The low wattage output uses very little energy, without compromising performance to keep your mirrors steam free.



Low profile

For the 230V Mirror Demister, the thickness is only 1mm. The 12V Mirror Demister is 3mm thick for easy application.

Pair the Mirror Demister with the Dual Control thermostat to set up a heating schedule to match your underfloor heating.



They look really smart and perform faultlessly...we think they are worth every penny.

Chris Layfield
Homeowner



**Electric radiators
provide a stylish, practical
and energy efficient way
of heating homes.**

Room heating

Easy on energy and the eye

An environmentally friendly alternative to traditional central heating systems that are so simple to install and use, you won't consider anything else for future projects.

Options for primary heating or where an instant boost of heat is needed are always available with designs to match any room style.

Reap the benefits of the range

- ✓ Stylish design - From stunning ultra flat glass designs, ergonomic features and easy control.
- ✓ Smart technology - Fast acting control reduces temperature overrun and maximises energy efficiency.
- ✓ Range of outputs - Effective heating for beautiful spaces up to 20m². Outputs range from 500W to 2,000W.
- ✓ Simple installation - Each electric radiator comes with everything you need to make installation quick and easy.
- ✓ Control your way - Touch display, remote control or via your phone. Control heating how you want to.
- ✓ Unrivalled availability - Speed matters. If you need electric radiators urgently, we'll ship them next day.



Oil Filled Radiator



Uncompromised high performance. Smart technology to warm homes with unquestionable energy efficiency.

- ✓ 36% more efficient than convector heaters thanks to high efficiency heat retention fluid.
- ✓ Built-in energy monitor to help identify opportunities to save energy.
- ✓ Set up a customised 7-day heating schedule to fit around different lifestyles.
- ✓ An ideal, modern replacement for electric storage heaters.

The ideal alternative to storage heaters

The smart electric Oil Filled Radiator is a great addition to any room where installing electric underfloor heating is not possible and is the ideal replacement for storage heaters.

The accurate, fast acting control reduces temperature overrun and maximises energy efficiency. Equipped with a built in energy monitor, the Oil Filled Radiator effectively tracks energy consumption which helps the user to also save on running costs.

Designed for efficiency

Each 75mm wide fin creates 150W of heat which is higher than most electric radiators. This gives you more output in a smaller space, increasing efficiency and minimizing the impact on your wall space.



Glass Panel Heater



Connected comfort. Designed to ensure optimum efficiency is maintained, controlling comfort is easy and installation is simple.

- ✓ Intuitive design with app control to easily set heating schedules.
- ✓ No wall space, no problem. It includes aluminium feet for a freestanding option.
- ✓ Designed with built-in overheat and tip over protection.
- ✓ From protection mode to eco 50% energy mode, it comes packed full of practical and energy saving features.



Control it your way

You can control the Glass Panel Radiator from your smartphone, the remote control or directly by using the intuitive LED display.

By downloading and using the app, you can create and set your heating schedules easily, make temperature adjustments from anywhere or simply switch between heating modes.



Remote included



Also available in black

Convactor Panel Heater



Intuitive, simple and effective heating.
A cost-effective alternative for rooms that need heat in an instant.

- ✔ Simple and easy to set up with display and intuitive control.
- ✔ 24/7 programmable heating schedule with comfort, economy and frost-free modes.
- ✔ Electrician required to hardwire to the mains.

Simple, hassle-free heating

The EcoDesign Lot 20 compliant Convactor Panel Heater is the cost effective option if you want to spend less on a heater but still feel the warmth in an instant.

Extremely effective at heating rooms quickly, but does require hard wiring into the mains so you'll need an electrician to install it.




Easily navigate through multiple modes

The intuitive control panel with LCD display makes setting up the Convactor Panel Heater simple. Navigate through multiple heating modes which include comfort, economy and frost-free.

Which one is right for you?

Features	Oil Filled	Glass Panel	Convactor
Wi-Fi control	X	✓	X
IR Remote control	X	✓	X
Wall mounted	✓	✓	✓
Free standing feet	X	✓	X
Eco 50% mode	X	✓	X
Energy monitor	✓	X	X
24/7 heating program	✓	✓	✓
Manual mode	✓	✓	✓
Open window sensor	✓	✓	✓
Self-learning pre heat	✓	X	X
LOT 20 compliant	✓	✓	✓
Overheat protection	✓	✓	✓
Tip over protection	X	✓	X
Frost protection	✓	✓	✓
Child safety lock	✓	✓	✓





Run hot water
and heating more
efficiently, that's
kinder to the
planet.

Water heating

Heating water just got reimagined

Conventional water heating systems don't cut the mustard when it comes to energy efficiency and sustainability. This range is different.

From the compact Electric Flow Boiler to the innovative Micro Electric Boiler, improving the efficiency of delivering hot water whilst reducing water waste is achieved with ease. A perfect combination for residential high-rise and commercial projects.

The water heating range of preference

- ✓ Superior efficiency - With an efficiency rating of 99.5%, the electric boiler range knocks gas out of the park.
- ✓ Reduces waste - Forget about wasting water while waiting for it to warm up. The Micro Electric Boiler delivers it in an instant.
- ✓ Compact design - Each electric boiler is compact in design and can be installed in the smallest of spaces.
- ✓ Fast to install - Choose an electric boiler with a circulation pump to save even more installation time.
- ✓ Multiple applications - Electric boilers easily connect and work with multiple heating systems, including wet underfloor heating systems.
- ✓ Minimal maintenance - Unlike their gas counterparts, electric boilers don't require an annual service, which reduces maintenance costs.

Electric Flow Boiler



Provides hot water up to 60°C for radiators and wet underfloor heating at 99.5% efficiency. Ideal for projects where space is limited.

- ✓ Compatible with an indirect cylinder to provide high flow hot water for baths and power showers.
- ✓ Ideal for apartments and properties without a mains gas supply.
- ✓ Simple and easy to retrofit with no annual maintenance costs.
- ✓ Available with and without a circulation pump.

Better in every way

Each component of the Electric Flow Boiler includes quality and innovation which makes it a reliable alternative to gas boilers. There's no burning of fossil fuels directly meaning zero carbon emissions, made even greener by powering with solar PV or a sustainable electricity supplier.

Choose an Electric Flow Boiler with or without a circulation pump then select from a wide range of outputs to suit projects of any size.

Works in harmony with existing heating systems

Electric boilers have always been most popular in off grid areas with no access to mains gas. However, with the increase in oil prices and the desire to reduce our reliance on fossil fuels, electric heating systems are on the rise and are becoming a more realistic option.

Examples of systems that the Electric Flow Boiler can integrate with



Wet underfloor heating



Central heating systems



Thermostatic radiator valves



Conventional room thermostats

Micro Electric Boiler



Decentralised hot water eliminates waste. Instantly deliver hot water, at the right temperature, whenever and wherever it is needed.

- ✓ Precise digital temperature control from 20°C-50°C.
- ✓ Can be factory limited to 42°C for NHS and care applications.
- ✓ Patented heating technology delivers 99.7% efficiency.
- ✓ A single unit can achieve a flow rate of 5.5 litres per minute or 11 litres per minute when two are installed in tandem.

There's no drawbacks

The Micro Electric Boiler doesn't suffer with the same drawbacks found with typical instantaneous hot water systems. It uses direct energy transfer rather than a high temperature heating element, which heats the water efficiently. There's no risk of overheating, burnout or scaling.

Ideal when you need space

The compact A4 sized design (315 x 210 x 170mm) makes it easy to install in confined spaces. It's a perfect fit for any type of residential or commercial project, where space is at a premium.



What can the Micro Electric Boiler be used for?



Domestic hot water systems



Top up for renewable systems



Wet underfloor heating



Multiple commercial applications



Intelligent snow melting and de-icing system to create a safer environment outside your home and business.

Driveway heating

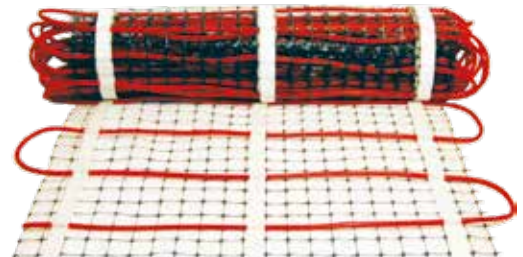
Snow melting systems that do the hard work for you

Electric heating systems for driveways can be used under virtually any surface to ensure it remains free from potential ice and snow build up.

No matter which system you choose, each system is perfectly suitable for both residential and commercial applications, designed for maximum efficiency and easy control.

The outdoor heating range includes:

- ✔ Intelligent sensors - Uses a combination of temperature and humidity sensors to only switch on when ice and snow is possible.
- ✔ Energy efficient - Electric heating is 100% efficient at point of use. There's no wasted energy which is better for your wallet.
- ✔ Easy control - Connect to an existing BMS system or set up independently and control with a Bluetooth programmable thermostat (BT21).
- ✔ Simple installation - Use pre-spaced matting systems for simple installation in straight runs and large square areas.
- ✔ Multiple applications - Systems like driveway heating are available in single phase for residential and 400V three phase for commercial.





Warranty & technical information

Everything you need to help you specify the right heating system

Important information about warranties

We pride ourselves in being able to offer some of the most comprehensive warranties available in the market for electric heating. However, to benefit from the lifetime warranty available for our electric underfloor heating systems, the installation MUST be registered by the installer within 60 days from the date of the installation. Register your warranty at:

www.thermosphere.com/support/warranty-registration

Category	Product	Warranty
Floor Heating	Mesh	Lifetime
Floor Heating	Ultimate	Lifetime
Floor Heating	Membrane Mat	Lifetime
Floor Heating	Foil	Lifetime
Floor Heating	Screed Cable	Lifetime
Floor Heating Accessories	Uncoated Insulation Board	-
Floor Heating Accessories	Coated Insulation Board	-
Floor Heating Accessories	Contactors Snubber	3 years
Heating Control	SmartHome	3 years
Heating Control	Bluetooth Programmable (BT21)	3 years
Heating Control	Programmable	3 years
Heating Control	Dual Control	3 years
Bathroom	Towel Bars	5 years
Bathroom	Mounting System	10 years
Bathroom	Towel Rails	5 years
Bathroom	Mirror Demisters	10 years
Room Heating	Oil Filled Radiator	5 years
Room Heating	Glass Panel Heater	2 years
Room Heating	Convactor Panel Heater	2 years
Water Heating	Electric Flow Boiler	3 years
Water Heating	Micro Electric Boiler	5 years
Driveway Heating	Driveway Heating Cable	15 years
Driveway Heating	Driveway Heating Mesh	15 years

Floor heating

Mesh 100W/m²

Area (m ²)	SKU	Size (m)	Output (W)	Resistance (Ω)
1.0	TSM-100-0100	2 x 0.5	100	530
1.5	TSM-100-0150	3 x 0.5	150	353
2.0	TSM-100-0200	4 x 0.5	200	265
2.5	TSM-100-0250	5 x 0.5	250	212
3.0	TSM-100-0300	6 x 0.5	300	176
3.5	TSM-100-0350	7 x 0.5	350	151
4.0	TSM-100-0400	8 x 0.5	400	132
5.0	TSM-100-0500	10 x 0.5	500	106
6.0	TSM-100-0600	12 x 0.5	600	88
8.0	TSM-100-0800	16 x 0.5	800	66
10.0	TSM-100-1000	20 x 0.5	1000	53
12.0	TSM-100-1200	24.0 x 0.5	1200	44

Mesh 150W/m²

Area (m ²)	SKU	Size (m)	Output (W)	Resistance (Ω)
1.0	TSM-150-0100	2 x 0.5	150	353
1.5	TSM-150-0150	3 x 0.5	225	235
2.0	TSM-150-0200	4 x 0.5	300	176
2.5	TSM-150-0250	5 x 0.5	375	141
3.0	TSM-150-0300	6 x 0.5	450	118
3.5	TSM-150-0350	7 x 0.5	525	101
4.0	TSM-150-0400	8 x 0.5	600	88
4.5	TSM-150-0450	9 x 0.5	675	78
5.0	TSM-150-0500	10 x 0.5	750	71
6.0	TSM-150-0600	12 x 0.5	900	59
7.0	TSM-150-0700	14 x 0.5	1050	50
8.0	TSM-150-0800	16 x 0.5	1200	44
9.0	TSM-150-0900	18 x 0.5	1350	39
10.0	TSM-150-1000	20 x 0.5	1500	35
12.0	TSM-150-1200	24 x 0.5	1800	29
14.0	TSM-150-1400	28 x 0.5	2100	25
16.0	TSM-150-1600	32 x 0.5	2400	22
20.0	TSM-150-2000	40 x 0.5	3000	18
24.0	TSM-150-2400	48 x 0.5	3600	15

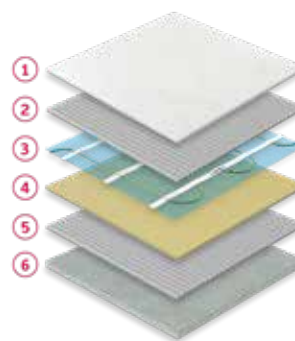
Mesh 200W/m²

Area (m ²)	SKU	Size (m)	Output (W)	Resistance (Ω)
1.0	TSM-200-0100	2 x 0.5	200	265
1.5	TSM-200-0150	3 x 0.5	300	176
2.0	TSM-200-0200	4 x 0.5	400	132
2.5	TSM-200-0250	5 x 0.5	500	106
3.0	TSM-200-0300	6 x 0.5	600	88
3.5	TSM-200-0350	7 x 0.5	700	76
4.0	TSM-200-0400	8 x 0.5	800	66
4.5	TSM-200-0450	9 x 0.5	900	58
5.0	TSM-200-0500	10 x 0.5	1000	53
6.0	TSM-200-0600	12 x 0.5	1200	44
7.0	TSM-200-0700	14 x 0.5	1400	38
8.0	TSM-200-0800	16 x 0.5	1600	33
9.0	TSM-200-0900	18 x 0.5	1800	29
10.0	TSM-200-1000	20 x 0.5	2000	26
12.0	TSM-200-1200	24 x 0.5	2400	22



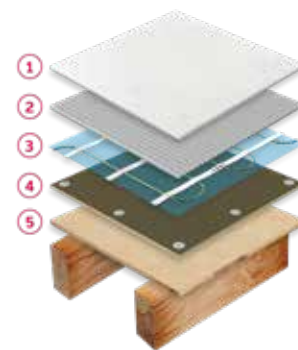
Scan to watch the installation video!

Concrete substrate



1. Tile
2. Flexible tile adhesive
3. Mesh
4. Uncoated insulation board
5. Flexible tile adhesive
6. Concrete substrate

Timber substrate



1. Tile
2. Flexible tile adhesive
3. Mesh
4. Coated insulation board
5. Timber substrate

ThermoSphere Ultimate®

Area (m ²) 130W/m ²	Area (m ²) 195W/m ²	SKU	Length (m)	Output (W)	Resistance (Ω)
1.15	0.77	HDMC-012-0150J	12	150	352
1.73	1.15	HDMC-018-0225J	18	225	235
2.31	1.54	HDMC-025-0300J	25	300	176
2.88	1.92	HDMC-031-0375J	31	375	141
3.46	2.31	HDMC-037-0450J	37	450	117
3.90	2.60	HDMC-042-0525J	42	525	100
4.62	3.08	HDMC-050-0600J	50	600	88
5.10	3.40	HDMC-055-0675J	55	675	78
5.77	3.85	HDMC-061-0750J	61	750	70
6.92	4.62	HDMC-075-0900J	75	900	58
8.32	4.99	HDMC-090-1080J	90	1080	48
9.23	6.15	HDMC-100-1200J	100	1200	44
11.54	7.69	HDMC-125-1500J	125	1500	35
13.85	9.23	HDMC-150-1800J	150	1800	29
16.17	10.78	HDMC-175-2100J	175	2100	25.2
18.46	12.31	HDMC-200-2400J	200	2400	22

3 stud spacing 2 stud spacing

Fleece backed membrane mat

Area (m ²)	SKU	Size
1.0	HDM-001	1m x 1m x 5.5mm
5.0	HDM-005	5m x 1m x 5.5mm
15.0	HDM-015	15m x 1m x 5.5mm

Self-adhesive membrane mat

Area (m ²)	SKU	Size
1.0	HDM-SA-001	1m x 1m x 5.5mm
15.0	HDM-SA-015	15m x 1m x 5.5mm

The self-adhesive membrane mat is best suited for installation on clean plywood or OSB subfloors. If you need to keep the floor build up to a minimum, choosing the self-adhesive option will save you 3mm of floor height.

Wet room accessories

SKU	Description	Size/Weight
HDM-WP-01	Waterproofing Paste (Joint coverage - 300g/Lm)	5kg
HDM-WT-01	Waterproofing Tape	10m x 120mm

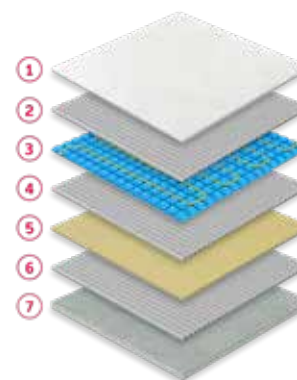
Other accessories

SKU	Description	Size/Weight
PYT-25-01	Fibre Reinforced Levelling Compound (5.25m ² at 3mm thick)	25kg
HDMA-015	Acrylic Adhesive (approx. 50m ²)	15kg
PIF-50-050	Perimeter Insulation Foam (areas over 10m ²)	5mm x 80mm x 50m



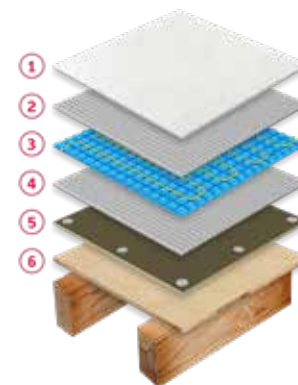
Scan to watch the installation video!

Concrete substrate



1. Tile 2. Flexible tile adhesive 3. Membrane
4. Flexible tile adhesive 5. Uncoated insulation board 6. Flexible tile adhesive 7. Concrete substrate

Timber substrate



1. Tile 2. Flexible tile adhesive 3. Membrane
4. Flexible tile adhesive 5. Coated insulation board 6. Timber substrate

Foil kits

Area (m ²)	SKU	Foil Size (m)	Output (W)	Resistance (Ω)
1.0	HFK-140-0100	2 x 0.5	140	337
1.5	HFK-140-0150	3 x 0.5	210	251
2.0	HFK-140-0200	4 x 0.5	280	188
2.5	HFK-140-0250	5 x 0.5	350	151
3.0	HFK-140-0300	6 x 0.5	420	126
4.0	HFK-140-0400	8 x 0.5	560	94
5.0	HFK-140-0500	10 x 0.5	700	75
6.0	HFK-140-0600	12 x 0.5	840	63
7.0	HFK-140-0700	14 x 0.5	980	53
8.0	HFK-140-0800	16 x 0.5	1120	47
9.0	HFK-140-0900	18 x 0.5	1260	41
10.0	HFK-140-1000	20 x 0.5	1400	37
12.0	HFK-140-1200	24 x 0.5	1680	31

Heating foil without any extras

Area (m ²)	SKU	Size (m)	Output (W)	Resistance (Ω)
1.0	WCVF-140-0100	2 x 0.5	140	337
1.5	WCVF-140-0150	3 x 0.5	210	251
2.0	WCVF-140-0200	4 x 0.5	280	188
2.5	WCVF-140-0250	5 x 0.5	350	151
3.0	WCVF-140-0300	6 x 0.5	420	126
4.0	WCVF-140-0400	8 x 0.5	560	94
5.0	WCVF-140-0500	10 x 0.5	700	75
6.0	WCVF-140-0600	12 x 0.5	840	63
7.0	WCVF-140-0700	14 x 0.5	980	53
8.0	WCVF-140-0800	16 x 0.5	1120	47
9.0	WCVF-140-0900	18 x 0.5	1260	41
10.0	WCVF-140-1000	20 x 0.5	1400	37
12.0	WCVF-140-1200	24 x 0.5	1680	31

Underlay and overlay

Area (m ²)	SKU	Description	Size
0.6	WCVF-CUSHU-01	Cushioning Underlay 0.6m ²	1200 x 500 x 5mm (0.6m ²)
6.0	WCVF-CUSHU	Cushioning Underlay 6m ²	1200 x 500 x 5mm (6m ²)
1.0	WCVF-CUSHO-01	Cushioning Overlay 1m ²	1m x 1m x 1.2mm (1m ²)
15.0	WCVF-CUSHO	Cushioning Overlay 15m ²	15m x 1m x 1.2mm (15m ²)
-	FT-050	Fixing Tape	50mm x 50m

HDF overlay for carpet and vinyl

Area (m ²)	SKU	Thickness (mm)	Size (m)	Pack Quantity
2.88	WCVF-HDFO	7	1.2 x 0.6	4 pairs

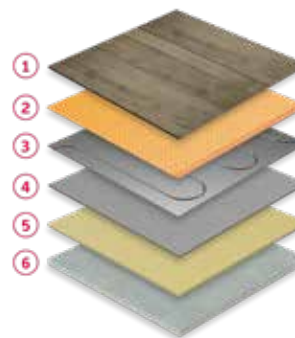
Cement overlay boards

Area (m ²)	SKU	Thickness (mm)	Size (m)
0.72	WCVF-CBHO	12	1.2 x 0.6



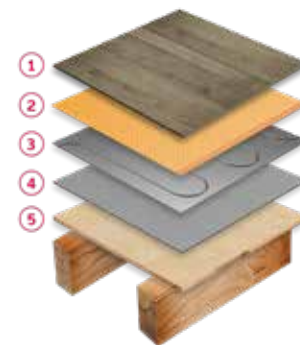
Scan to watch the installation video!

Concrete substrate



1. Engineered timber floor
2. Cushioning overlay
3. Foil
4. Cushioning underlay
5. Uncoated insulation board
6. Concrete substrate

Timber substrate



1. Engineered timber floor
2. Cushioning overlay
3. Foil
4. Cushioning underlay
5. Timber substrate

Accessories

Uncoated insulation board

SKU	Description	Depth (mm)	Pack Area (m ²)	Pack Quantity
CIB-006-20	Uncoated Insulation Board	6.0	14.4	20
CIB-105-10	Uncoated Insulation Board	10.5	7.2	10

Coated insulation boards

SKU	Description	Depth (mm)	Pack Area (m ²)	Pack Quantity
TIB-006-08	Coated Insulation Board	6.0	5.76	8
TIB-010-06	Coated Insulation Board	10.0	4.32	6
TIB-012-06	Coated Insulation Board	12.0	4.32	6
TIB-020-06	Coated Insulation Board	20.0	4.32	6
TIB-030-04	Coated Insulation Board	30.0	2.88	4
TIB-040-03	Coated Insulation Board	40.0	2.16	3
TIB-050-02	Coated Insulation Board	50.0	1.44	2

Installation accessories

SKU	Description	Size	Pack Quantity
TIB-JT-01	Joint Tape 125mm x 25m	25m	1
TIB-MFW-01	Metal Washers	Ø35mm	100
TIB-FS-01	Fixing Screws	32mm	1000

Why we always recommend installing insulation board

One of the most frequent questions we get asked by homeowners is 'Why is my underfloor heating taking so long to heat up?' 99% of the time it is because the system has been installed without insulation board.

When you install underfloor heating without insulation board, the heating cable will warm the layer below and the layer above at the same rate. Because of this, it will take twice as long for the floor to heat up to the right temperature, as you will be losing heat energy downwards, which means that the system will cost much more to run.

Contactors snubber

If the total load of the electric underfloor heating exceeds 16A, you can't control it from a single thermostat, unless you use a contactor snubber!

SKU	Description	Max Output (W)
CSN-025	Contactors Snubber 25A	5700
CSN-040	Contactors Snubber 40A	9000
CSN-063	Contactors Snubber 63A	14440

Extra floor sensors

Floor sensors tell a thermostat when the floor needs heat, so if the floor sensor ever gets damaged or stops working, you'll need to install another. We recommend installing a backup sensor in every floor.

SKU	Description	Length (m)
FSPB-10-03	Floor Sensor Probe 3m	3
FSPB-10-10	Floor Sensor Probe 10m	10



Heating control

SmartHome

SKU	Description	Size (mm)	IP Rating	Max Load (A)
SHC-W-01	SmartHome Control White	87 x 87 x 36 (22mm in wall)	IP21	16
SHC-B-01	SmartHome Control Black	87 x 87 x 36 (22mm in wall)	IP21	16
SHH-01	SmartHome Hub	95 x 95 x 20	IP30	-
SH-01	SmartHome Plug	-	-	10

Bluetooth Programmable (BT21)

SKU	Description	Size (mm)	IP Rating	Max Load (A)
BT21	Bluetooth Thermostat	86 x 86 x 10 (25mm in wall)	IP21	16
BT21-WTHS	Wireless Temperature & Humidity Sensor	86 x 5	IP67	-

Programmable

SKU	Description	Size (mm)	IP Rating	Max Load (A)
SCP-W-01	Programmable White	85 x 85 x 46 (31mm in wall)	IP30	16
SCP-B-01	Programmable Black	85 x 85 x 46 (31mm in wall)	IP30	16

Dual Control

SKU	Description	Size (mm)	IP Rating	Max Load (A)
DC-W-01	Dual Control White	129 x 88 x 48 (31mm in wall)	IP30	20
DC-B-01	Dual Control Black	129 x 88 x 48 (31mm in wall)	IP30	20

Bathroom

Single Mounted Towel Bar - round

SKU	Size (mm)	Finish	Output (W)
HTB-SRS-500-DPS	500 x 32 x 100	Diamond Polished	25
HTB-SRS-500-BSS	500 x 32 x 100	Brushed Stainless	25
HTB-SRS-500-PLB	500 x 32 x 100	Diamond Polished Brass	25
HTB-SRS-500-BRB	500 x 32 x 100	Brushed Brass	25
HTB-SRS-500-MBK	500 x 32 x 100	Matt Black	25
HTB-SRS-500-MWT	500 x 32 x 100	Matt White	25

Single Mounted Towel Bar - square

SKU	Size (mm)	Finish	Output (W)
HTB-SSS-500-DPS	500 x 32 x 100	Diamond Polished	25
HTB-SSS-500-BSS	500 x 32 x 100	Brushed Stainless	25
HTB-SSS-500-PLB	500 x 32 x 100	Diamond Polished Brass	25
HTB-SSS-500-BRB	500 x 32 x 100	Brushed Brass	25
HTB-SSS-500-MBK	500 x 32 x 100	Matt Black	25
HTB-SSS-500-MWT	500 x 32 x 100	Matt White	25

Double Mounted Towel Bar - round

SKU	Size (mm)	Finish	Output (W)
HTB-DR-450-DPS	450 x 32 x 100	Diamond Polished	25
HTB-DR-450-BSS	450 x 32 x 100	Brushed Stainless	25
HTB-DR-450-PLB	450 x 32 x 100	Diamond Polished Brass	25
HTB-DR-450-BRB	450 x 32 x 100	Brushed Brass	25
HTB-DR-450-MBK	450 x 32 x 100	Matt Black	25
HTB-DR-450-MWT	450 x 32 x 100	Matt White	25
HTB-DR-632-DPS	632 x 32 x 100	Diamond Polished	35
HTB-DR-632-BSS	632 x 32 x 100	Brushed Stainless	35
HTB-DR-632-PLB	632 x 32 x 100	Diamond Polished Brass	35
HTB-DR-632-BRB	632 x 32 x 100	Brushed Brass	35
HTB-DR-632-MBK	632 x 32 x 100	Matt Black	35
HTB-DR-632-MWT	632 x 32 x 100	Matt White	35

Double Mounted Towel Bar - Square

SKU	Size (mm)	Finish	Output (W)
HTB-DS-450-DPS	450 x 40 x 100	Diamond Polished	25
HTB-DS-450-BSS	450 x 40 x 100	Brushed Stainless	25
HTB-DS-450-PLB	450 x 40 x 100	Diamond Polished Brass	25
HTB-DS-450-BRB	450 x 40 x 100	Brushed Brass	25
HTB-DS-450-MBK	450 x 40 x 100	Matt Black	25
HTB-DS-450-MWT	450 x 40 x 100	Matt White	25
HTB-DS-632-DPS	632 x 40 x 100	Diamond Polished	35
HTB-DS-632-BSS	632 x 40 x 100	Brushed Stainless	35
HTB-DS-632-PLB	632 x 40 x 100	Diamond Polished Brass	35
HTB-DS-632-BRB	632 x 40 x 100	Brushed Brass	35
HTB-DS-632-MBK	632 x 40 x 100	Matt Black	35
HTB-DS-632-MWT	632 x 40 x 100	Matt White	35

Installation accessories

SKU	Description	Size (mm)
TBMS-1000S	Mounting system (Single Mount)	1000 x 120 x 12
TBMS-1000	Mounting system (Double Mount)	1000 x 120 x 12
TBSD-800	Spigot (Double Mount)	ø12 x 80
HTB-12VT-060	Towel Bar Transformer 10-60W	104 x 39 x 25
HTB-12VT-105	Towel Bar Transformer 35-105W	145 x 39 x 25
HTB-12VT-210	Towel Bar Transformer 50-210W	164 x 46 x 32

Towel Rails - 230V dry element

SKU	Size (mm) (H x W)	Profile	Output (W)
HTR-R-0700530	700 x 530	Straight round	76
HTR-R-1120400	1120 x 400	Straight round	65
HTR-R-1120530	1120 x 530	Straight round	80
HTR-RC-0800600	800 x 600	Curved round	80
HTR-SS-0800600	800 x 600	Straight square	83

Pair a towel bar or towel rail with the Dual Control thermostat to set up a heating schedule to match your underfloor heating.



Room heating

Oil Filled Radiator

SKU	Output (W)	Max area (m ²) High / Low insulation	Size (mm)
TSR-0500-A	500	5.0 / 3.0	335 x 590 x 95
TSR-0800-A	800	8.0 / 4.8	505 x 590 x 95
TSR-1000-A	1000	10.0 / 6.0	595 x 590 x 95
TSR-1300-A	1300	13.0 / 7.8	745 x 590 x 95
TSR-1500-A	1500	15.0 / 9.0	835 x 590 x 95
TSR-2000-A	2000	20.0 / 12.0	1075 x 590 x 95

Glass Panel Heater

SKU	Output (W)	Max area (m ²) High / Low insulation	Size (mm)
TSGFR-1500-W	750 - 1500	13 / 9	675 x 450 x 105
TSGFR-2000-W	1000 - 2000	18 / 12	835 x 450 x 105
TSGFR-1500-B	750 - 1500	13 / 9	675 x 450 x 105
TSGFR-2000-B	1000 - 2000	18 / 12	835 x 450 x 105

Convactor Panel Heater

SKU	Output (W)	Max area (m ²) High / Low insulation	Size (mm)
TSCR-0500	500	5 / 3	520 x 470 x 100
TSCR-1000	1000	9 / 6	600 x 470 x 100
TSCR-1500	1500	13 / 9	720 x 470 x 100
TSCR-2000	2000	18 / 12	840 x 470 x 100

What size electric radiator do you need?

The British Thermal Unit (BTU) is a common measure of the heat a radiator will emit into a room. If it's too low, the space will not reach the desired temperature. To calculate the required BTU you will need to measure the length, width and height of the room and take into account windows and patio doors.

If you know the output (watts) of the radiator, simply multiply that by 3.41 to get the BTU/hr and if you have the BTU, you can divide it by 3.41 to get the watts or output you need.

For example, if the output of the electric radiator is 600W then the BTU/hr would be 2,046: 600(W) x 3.41 = 2,046 (BTU/hr)

Water heating

Electric Flow Boilers - no pump

SKU	Output (kW)	Current (A)	Size (mm)	Max Temp (°C)
TSEFB-4.5	4500	21	220 x 575 x 115	60
TSEFB-6	6000	27	220 x 575 x 115	60
TSEFB-9	9000	40	220 x 575 x 115	60
TSEFB-12	12000	53	220 x 575 x 115	60
TSEFB-15	15000	22	220 x 575 x 115	60

Electric Flow Boilers - with pump

SKU	Output (kW)	Current (A)	Size (mm)	Max Temp (°C)
TSEFB-4.5	4500	21	215 x 730 x 122	60
TSEFB-6	6000	27	215 x 730 x 122	60
TSEFB-9	9000	40	215 x 730 x 122	60
TSEFB-12	12000	53	215 x 730 x 122	60
TSEFB-15	15000	22	215 x 730 x 122	60
TSEFB-P18	18000	26	215 x 730 x 122	60
TSEFB-P24	24000	35	215 x 730 x 122	60

When is an electric boiler not a good option?

- ✓ When the electrical load is exceeded.
- ✓ Where running costs are less with a viable alternative.
- ✓ When costs don't fit with the investment available.

What to consider when thinking about electric boilers:

- ✓ Do you have enough electrical load?
- ✓ How many litres of water will be used?
- ✓ What temperature do you need the water at?
- ✓ How many radiators/underfloor heating zones will be heated?

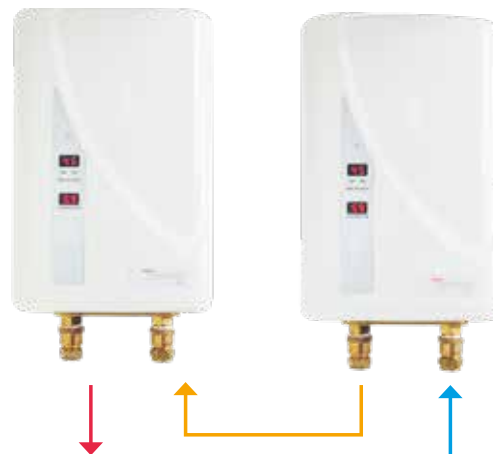
Micro Electric Boilers

SKU	Output (kW)	Current (A)	Flow rate LPM (+25°C Increase)	Max Temp (°C)
TSMEB-4	4.8	20	2.8	50
TSMEB-6	6.0	25	3.4	50
TSMEB-7	7.2	30	4.1	50
TSMEB-8	8.4	35	4.8	50
TSMEB-9	9.6	40	5.5	50

Double the flow

Some instantaneous hot water systems just don't cut the mustard when it comes to flow rates. The Micro Electric Boiler is different. In fact, you'll be able to achieve over double the flow rate, as much as 5.5 litres per minute, compared with other instantaneous hot water systems.

Need more flow? No problem. You can install two Micro Electric Boilers in tandem to deliver flow rates of 11 litres per minute!



Driveway heating

230V Driveway Heating Cables

SKU	Description	Length (m)	Output (W)
TSDHC-30-1100	Driveway Heating Cable 1100W	38	850
TSDHC-30-2000	Driveway Heating Cable 2000W	67	1100
TSDHC-30-2500	Driveway Heating Cable 2500W	84	1400
TSDHC-30-3350	Driveway Heating Cable 3350W	112	1700
TSDHC-30-4000	Driveway Heating Cable 4000W	134	2000
TSDHC-30-4500	Driveway Heating Cable 4500W	150	2250
TSDHC-30-6000	Driveway Heating Cable 6000W	200	2500

230V Driveway Heating Mesh

SKU	Description	Area (m ²)	Output (W)
TSDHM-300-0400	Driveway Heating Mesh 1100W	3.7	1100
TSDHM-300-0700	Driveway Heating Mesh 2000W	6.7	2000
TSDHM-300-0800	Driveway Heating Mesh 2500W	8.3	2500
TSDHM-300-1100	Driveway Heating Mesh 3350W	11.2	3350
TSDHM-300-1300	Driveway Heating Mesh 4000W	13.3	4000
TSDHM-300-1500	Driveway Heating Mesh 4500W	15.0	4500
TSDHM-300-2000	Driveway Heating Mesh 6000W	20.0	6000



ThermoSphere are great to work with. We looked across the market and they provided the solution.

**Will Tindall, CEO,
Escapade**



Training

If you are looking to give your electric heating knowledge a healthy boost, then take advantage of our new training area at ThermoSphere HQ in Kent and the insight our heating experts have to share.

This year we are running monthly training sessions for anyone who specifies, buys or installs electric heating.

What does a typical session cover?

- ✓ Why electric heating?
- ✓ ThermoSphere's electric heating range
- ✓ Specifying different heating systems
- ✓ Installation do's and don'ts
- ✓ The commissioning process
- ✓ Troubleshooting tips

How long does the session last?

Usually 1 day (9am – 4pm)
However, training can be tailored to your requirements. Just want to focus on floor heating? No problem.

How much does it cost?

Absolutely nothing. And of course, lunch and refreshments are included!

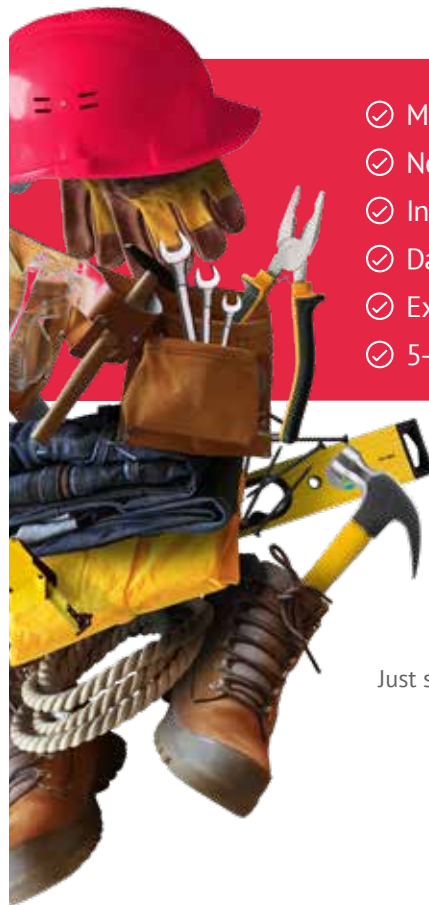
Scan to see the range of dates available to book!



thermo
Sphere
CONNECT

Join for free

Providing installers with support, rewards and training for electric heating.



- ✓ Monthly giveaways
- ✓ Next day delivery
- ✓ Installation training
- ✓ Damage cover
- ✓ Exclusive early access
- ✓ 5-star technical support

Just scan the QR code or search **ThermoSphere CONNECT** and complete the form. That's it! Nice and easy.



0800 019 5899
sales@thermosphere.com
www.thermosphere.com



Leading the charge for electric heating

ThermoSphere
Bridge House
Pattenden Lane
Marden
Kent
TN12 9QJ

0800 019 5899
enquiries@thermosphere.com
www.thermosphere.com



Find us on LinkedIn
Search "ThermoSphere"



Check out our YouTube channel
Search "ThermoSphere underfloor heating"



Find us on Instagram
Search "ThermoSphere"

© 2023 Thermogroup Ltd. ThermoSphere is a trading name of Thermogroup Ltd