2020 PRODUCT GUIDE

thermonet

Bringing the Very Best in Electric Underfloor Heating

Thermonet America reserves the right to alter designs, product specifications and materials without notice. All measurements are subject to manufacturing tolerances. All information in this brochure is correct at time of publication.

GUARANTEE INFORMATION

Thermonet America covers all its products with a satisfaction guarantee. In addition, Thermonet America will supply a replacement product where a fault is shown to be caused by faulty manufacture, materials or workmanship providing the goods have been installed correctly & according to the installation instructions. Our goods and services come with guarantees that cannot be excluded under the American Consumer Law. For major failures with the service, you are entitled: to cancel your service contract with us; and to a refund for the unused portion, or to compensation for its reduced value. You are also entitled to choose a refund or replacement for major failures with goods. If a failure with the goods or a service does not amount to a major failure, you are entitled to have the failure rectified in a reasonable time. If this is not done you are entitled to a refund for the goods and to cancel the contract for the service and obtain a refund of any unused portion. You are also entitled to be compensated for any other reasonably foreseeable loss or damage from a failure in the goods or service.

Prices valid from 01/04/2020. Subject to change without notice.

“Delivering excellence in the manufacture, distribution and support of market leading heating products”

thermonet

Serving the Heating Industry

SINCE 2004

Core Purpose

Allowing resellers to achieve their goals through trust, simplicity and elevating them in the eyes of their customers.

Our Values

Trust

We operate on the basis of trust. Speed happens when people trust each other, allowing us to serve our customers in the best possible way.

Put Customers First

We put customers at the centre of everything we do to ensure we achieve the very best outcome for the customer. We are committed to going above and beyond to deliver that little bit extra.

Continuous Improvement

We do not fear change; instead, we encourage innovation, creativity and being on the leading edge. There is always further to go and more to explore through challenging the status quo.

Strive for Simplicity

We believe that there is always a simpler way of doing everything and we are committed to finding the simplest option in every scenario.

Passionate

Through a love of what we do, we delight our clients. We are serious about results and are driven by our sense of urgency to achieve. We are focused on our goals and wholeheartedly committed to always giving 100%.

Positive

Positivity is a choice to be optimistic, content, and upbeat. We aim to create an environment where positivity can thrive, so people can laugh, have fun and do good.

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Environmental Focus

2020 is a year of change, challenge, growth and renewal. We have entered 2020 with a record-breaking heatwave, devasting bushfires and prolonged drought in a world that is more focused on climate change than ever before. Being a supplier of electric heating products, Thermonet America is aware of our responsibility towards keeping the planet clean and green while supporting the communities in which we live.

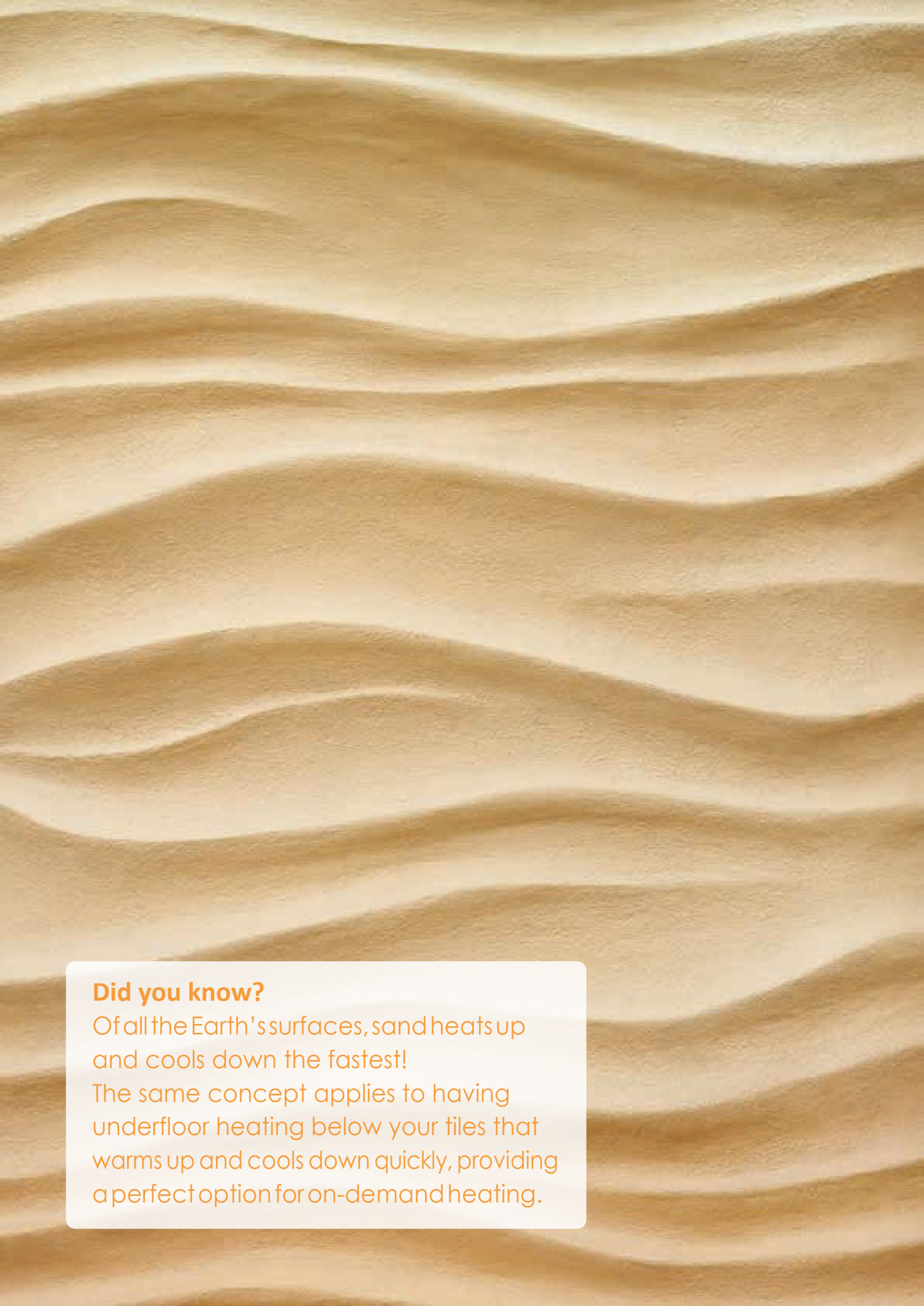
Electric underfloor heating systems have some distinct advantages over traditional heating. These include:

- 100% efficient at the point of use. Every unit of electricity that you pay for becomes heat energy.
- Electricity is now increasingly being generated by renewable sources on both domestic and commercial scales.
- All our heating products can be run using a solar electric system.
- Thermostats allow a higher level of monitoring and control than other forms of heating.
- Zero ongoing maintenance and very low lifetime cost when compared to a gas or aircon heating system.
- Much lower safety risk than a gas system as there is no fossil fuel consumption and no potential for gas leaks or carbon monoxide issues.
- Insulation helps to reduce heat loss, improve the efficiency of the system and reduce running costs.

Furthermore, Thermonet America is committed to the following in 2020 to fulfil our social and environmental responsibility.

- Reduce, reuse and recycle all that we can. A program to recycle 100% of all recyclable materials used. This covers our office and warehouse environments.
- Improve ecosystems. We will plant one tree for every floor heating system sold (based on thermostat quantity).
- Eco-friendly materials. Incorporating bio-derivative materials and supplies into all our processes.
- Supporting Environmental Impact and Social Responsibility initiatives.

Our environmental objectives and targets are designed to continually reduce our environmental impact and improve our sustainability into the future.



Did you know?
Of all the Earth's surfaces, sand heats up and cools down the fastest!
The same concept applies to having underfloor heating below your tiles that warms up and cools down quickly, providing a perfect option for on-demand heating.

Underfloor Heating Systems

What are the benefits of underfloor heating?

An electric underfloor heating system provides an energy efficient, on demand heating system as well as interior design flexibility which improves comfort and space for everyone.

Radiators and Air Conditioning

Inefficient convection heating

Traditional convection heaters distribute heat unevenly throughout a room, resulting in drafts, hot heads and cold feet.

Heating in this way usually means your thermostat must be set to a higher temperature to achieve the desired comfort level, which increases heat loss and energy bills.

Underfloor Heating

Improved efficiency and comfort

Underfloor heating provides a comfortable, even temperature throughout the room.

Where the heating covers more than 80% of the room it can be used as the primary heat source.

You can also free up valuable wall space creating freedom for interior design.

The benefits of underfloor heating

Comfortable heat

Underfloor Heating spreads heat evenly across the floor allowing it to naturally & gently heat the room.

Energy efficient

Hot air rises naturally making heating at ground level an efficient way to heat the room.

Accurate control

With the use of a thermostat you can control when your floor heating is on & off and control the temperature.

Allergy friendly

There is no air or dust movement, making it the perfect system for allergy or asthma sufferers.

Warm floors

Eliminate cold floors and experience warmth and comfort from your toes up.

Zero maintenance

Our systems are electric, meaning they are maintenance and hassle free.

Lifetime Warranty

Every system is tested in our manufacturing plant in Germany and we can offer you peace of mind with our lifetime warranty.

Rapid heat up time

With Underfloor Heating installed directly below your tiles you have an on-demand heating system.

Interior design freedom

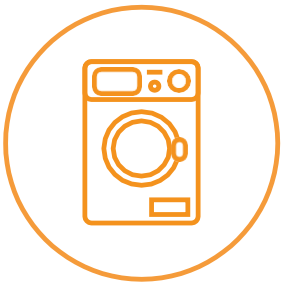
With the heating system invisible below your floor you can design your room how you please without any heaters to work around.

Energy consumption

Our homes are full of electrical goods, some of which have a much higher energy consumption than you may think. Here are some examples of the average wattage of some familiar products found in homes all over America. Thermonet offers 150 watts per square meter (14W/ft^2) systems.

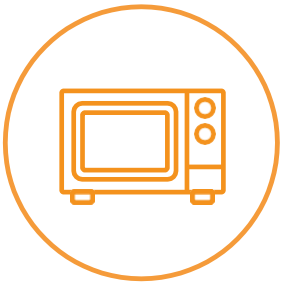
3m^2 Floor Heating
450W*

Television
100W



Washer/Dryer
1500W

Airconditioner
2500W



Microwave Oven
1000W

Vacuum Cleaner
700W

* Based on 150 Watts per square meter (14W/ft^2).

Heat up times

The 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 Thermonet system can be up to 50% more efficient than an un-insulated system, especially when managed by a programmable thermostat. Average heat up times can be seen in the table below:

	150W/m (14W/ft^2)
Un-insulated Concrete	2 - 4 hrs
Concrete with 10mm (0.4") Insulation	1 hr
Concrete with 10mm (0.4") insulation & 25mm (1") Screed	2 hrs
Un-insulated Timber Substrate	1 hr
Timber Substrate with 10mm (0.4") Insulation	30 mins

(Allow an additional 1hr per 25mm (1") of screed for heat to penetrate)

PLEASE NOTE: This information is gathered from multiple online sources and provided as an illustration example only. This information does not imply any warranty or guarantee of energy consumption and/or electricity costs. E&OE.

Running cost estimations

Many people assume that an electric underfloor heating system is going to be expensive to run. In actual fact, when you consider the fast response times, level of precise control and a tailored, zoned heating schedule, it is a very efficient and cost-effective way to heat your home.

Area	1m² (10.7 ft²)	2m² (21.5 ft²)	4m² (43 ft²)	5m² (53.8 ft²)	10m² (107.6 ft²)	15m² (161.5 ft²)	25m² (269 ft²)
1 hr	$0.04	$0.09	$0.18	$0.23	$0.45	$0.68	$1.13
2 hrs	$0.09	$0.18	$0.36	$0.45	$0.90	$1.35	$2.25
3 hrs	$0.13	$0.27	$0.54	$0.68	$1.35	$2.02	$3.38
4 hrs	$0.18	$0.36	$0.72	$0.90	$1.80	$2.70	$4.50
5 hrs	$0.23	$0.45	$0.90	$1.13	$2.25	$3.38	$5.63
6 hrs	$0.27	$0.54	$1.08	$1.35	$2.70	$4.05	$6.75
7 hrs	$0.32	$0.63	$1.26	$1.57	$3.15	$4.72	$7.88
8 hrs	$0.36	$0.72	$1.44	$1.80	$3.60	$5.40	$9.00

The following reasonable assumptions have been made to calculate these estimations:

- System is installed in a house built and insulated to current regulations
- 150W/m²(14W/ft²) system under a 10mm (0.4") ceramic tile on 10mm insulation board
- Heat up time is included in the times displayed
- Energy price of $0.30/kWh (average price at time of printing)
- A 7 day, 6 event programmable thermostat has been installed
- Floor temperatures set to an efficient 24°C (75°F)

Which underfloor heating system is best for your project?

Under Tile Heating

Tiles are a very popular and common floor finish; however one major disadvantage is they are cold to walk on, especially in winter. This can be overcome with an under tile heating system which allows you to experience the feeling of a warm tiled floor.

Thermonet 150W/m^2

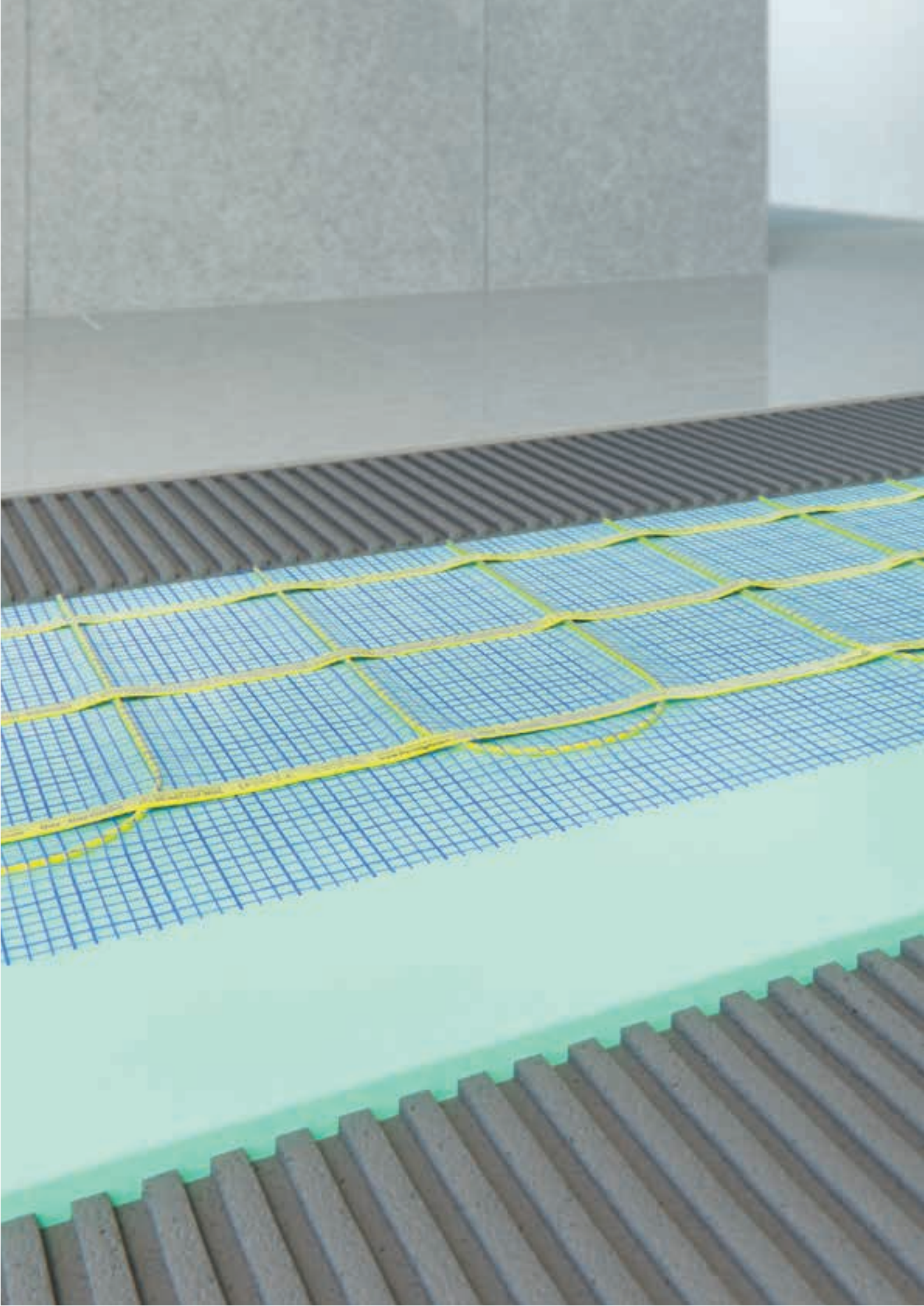
Thermonet 150W is an underfloor heating mat system that is specially designed to be installed directly beneath your tiles.

Vario

Vario is an under tile loose wire heating system ideal for installing in small, awkward areas and is designed to be installed directly beneath the tiles.

Vario Pro

Vario PRO is the ultimate professional tiling solution that combines electric underfloor heating with an uncoupling, crack isolation and waterproofing membrane.



Thermonet is a versatile electric underfloor heating mat system designed for easy installation under a range of floor finishes

Thermonet is commonly installed under tiled floors. Many people don't realise that you can also bring the warm feeling to an engineered timber, vinyl and even a carpet floor by including a layer of flexible self levelling compound in your floor build up.

Lifetime Warranty

We are so confident of the quality of our German-made Thermonet Underfloor Heating that we give each system a warranty that lasts a Lifetime with 3 year warranty on our Thermostats.

TwistedTwin cable construction

The unique stress free cable construction creates a longer lasting heating cable with zero electromagnetic field (Zero EMF).

Fully self adhesive mesh

The self adhesive mesh speeds up installation by holding Thermonet matting to the substrate for easy self levelling and tile fixing.

Heating cable protection

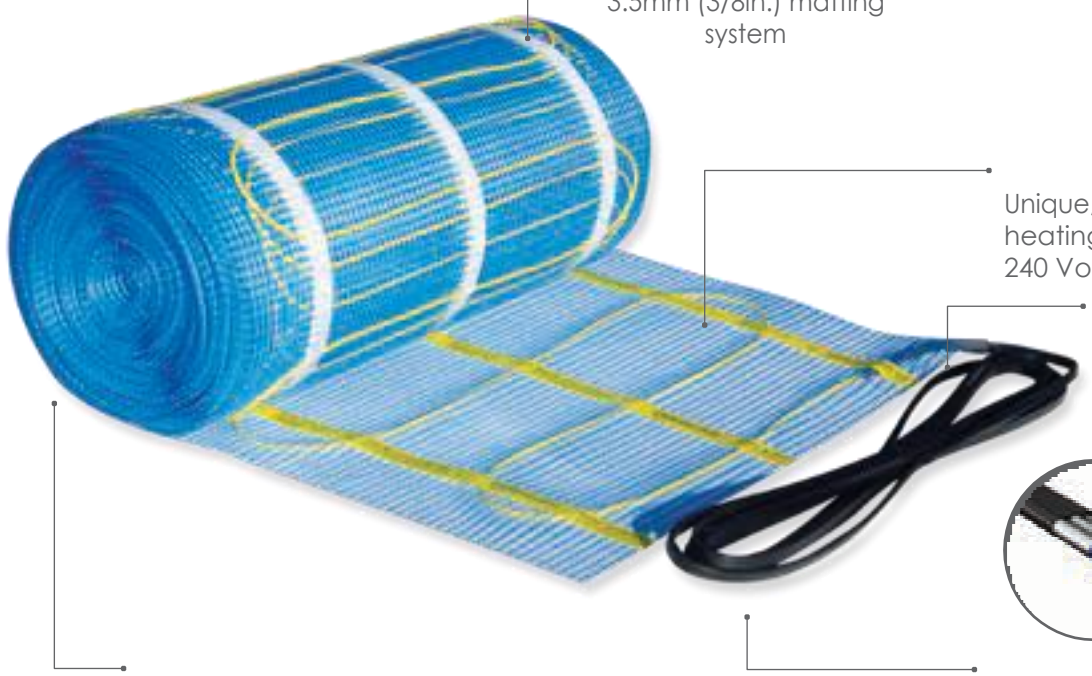
Thermonet is installed wire-side-down which means the heating cable is protected from damage during installation by the hard wearing mesh layer.

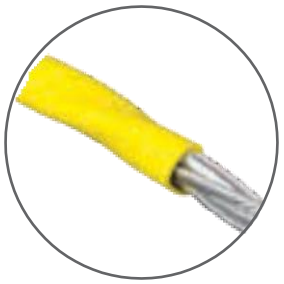
Minimal height build-up

Utilising innovative extrusion processes provides real 'lay flat' technology that makes installing Thermonet easy. The matting system is only 3.5mm (3/8 in.) thick with a low profile cold tail of only 4mm (3/8 in.) thick which is typically concealed within the tile adhesive layer.

When installing under soft floor finishes such as vinyl, carpet and engineered timber, please be sure to consult the floor finish manufacturer for guidance on compatibility and maximum temperature.

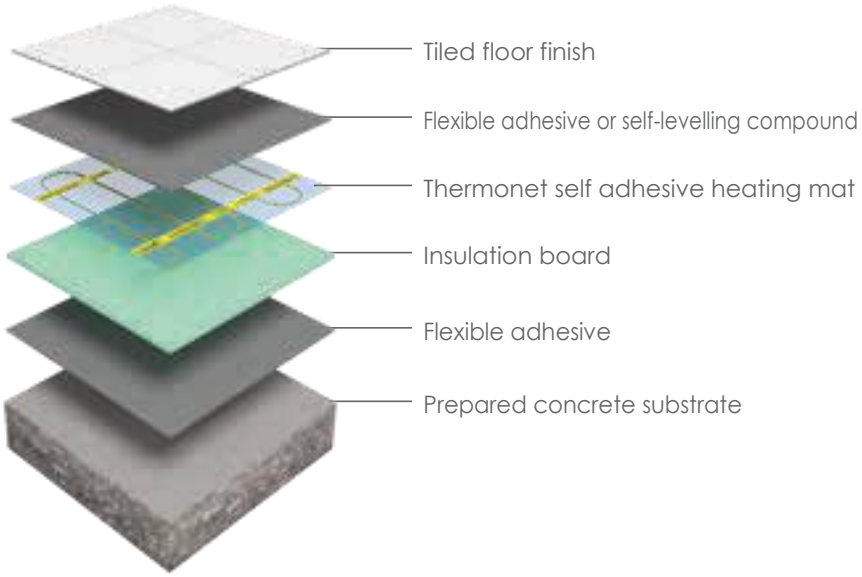
thermonet
UNDERFLOOR HEATING



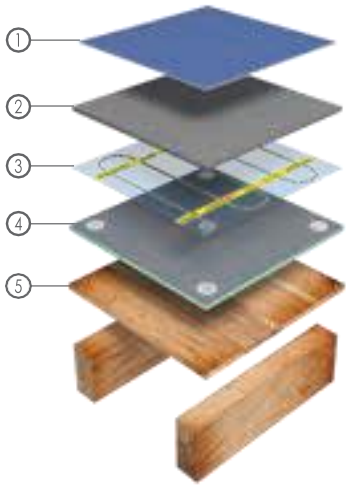


Stock Code	Size (m)	Area (m^2)	Output (W)	Resistance (Ω)	Price ($)	Price/sq. ft
111502	2 x 0.5 (20" x 63")	0.8 (9 ft^2)	150	110	180.33	20.04
111503	2 x 0.5 (20" x 78")	1.0 (11 ft^2)	225	88	212.00	19.27
111504	4 x 0.5 (20" x 102")	1.5 (15 ft^2)	300	65	275.00	18.33
111505	5 x 0.5 (20" x 144")	2.0 (20 ft^2)	375	46	360.00	18.00
111506	6 x 0.5 (20" x 186")	2.5 (26 ft^2)	450	37.5	460.00	17.69
111507	7 x 0.5 (20" x 228")	3.0 (32 ft^2)	525	30	550.00	17.19
111508	8 x 0.5 (20" x 256")	3.3 (36 ft^2)	600	26	600.00	16.67
111509	9 x 0.5 (20" x 348")	4.5 (49 ft^2)	675	20	750.00	15.31
111510	10 x 0.5 (20" x 384")	5.0 (54 ft^2)	750	18	820.00	15.19
111512	12 x 0.5 (20" x 492")	6.5 (69 ft^2)	900	14	1020.00	14.78
111514	14 x 0.5 (20" x 582")	7.3 (79 ft^2)	1050	12	1120.00	14.18
111516	16 x 0.5 (20" x 660")	8.5 (92 ft^2)	1200	10.5	1260.00	13.70

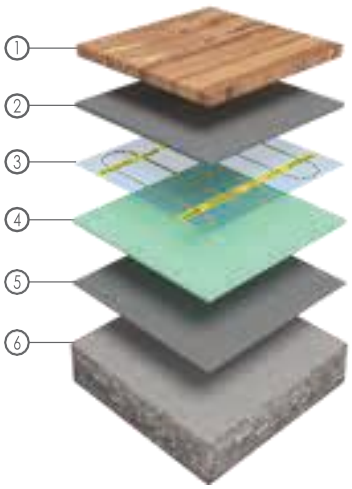
Thermonet is most commonly installed under tiled floors. The heating cable is protected by the mesh and can be tiled over directly, or covered with a layer of self levelling compound.



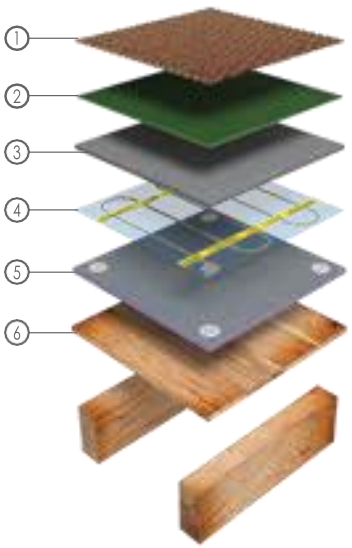
Thermonet electric underfloor heating can be used in almost any floor build-up or with any floor finish from tiles and vinyl to carpet and timber floors.



1. Glued vinyl floor finish
2. Flexible self levelling compound*
3. Thermonet heating mat
4. Standard coated insulation
5. Timber substrate



1. Engineered timber floor finish
2. Flexible self levelling compound*
3. Thermonet heating mat
4. Standard coated insulation
5. Flexible tile adhesive
6. Prepared concrete substrate



1. Carpet floor finish**
2. Low tog underlay**
3. Flexible self levelling compound*
4. Thermonet heating mat
5. Standard coated insulation
6. Timber substrate

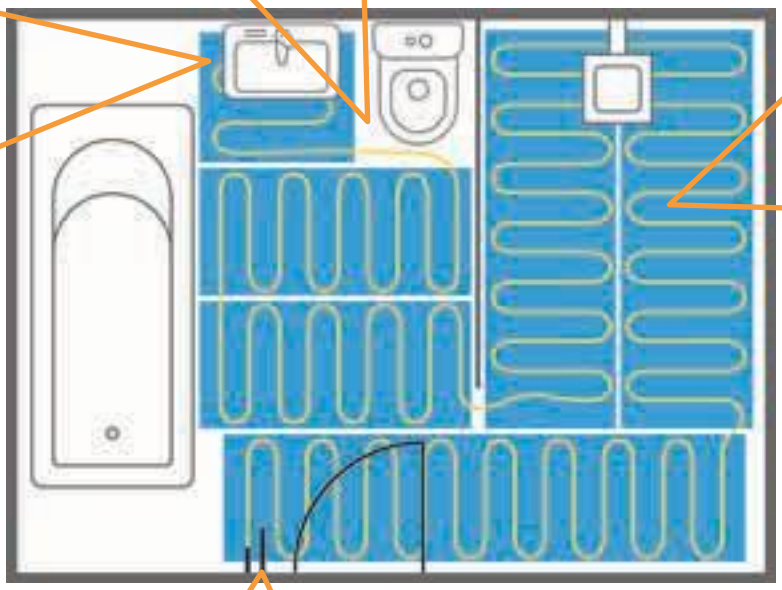
*Minimum recommended thickness of 10mm
**Combined TOG rating needs to be under 2.5

thermonet
UNDERFLOOR HEATING

Underfloor Heating Installation

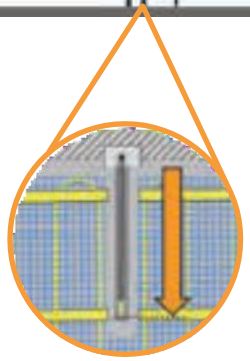
The diagram below displays a typical bathroom layout with Thermonet Underfloor Heating. The mat system ensures a fast and simple installation with the heating mat covering the entire available floor space. Some of the key features of the Underfloor Heating systems have been highlighted below.

When Thermonet mats are needed to fit around irregular shapes like a toilet or vanity, simply remove the cable from the mesh and arrange in loops to cover the area.



If you have a wall hung vanity always allow enough floor heating to run in front of the vanity to ensure this floor area is warm.

Thermonet is safe to be installed under a tiled shower. This reduces mould build up and grout decolouring and helps to dry the floor, eliminating slip hazards.

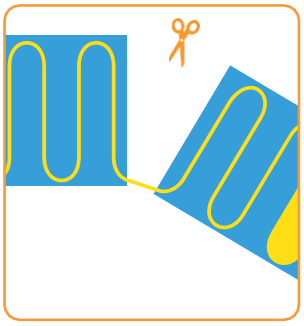


Ensure the floor sensor is installed in the conduit and placed equally between two runs of heating cable to provide an accurate floor temperature reading.

Cut-and-return installation explained

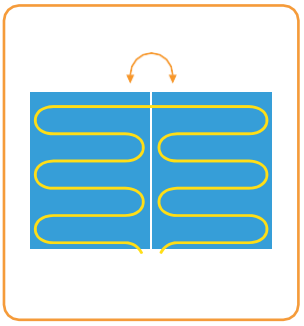
Every room is different, and you will usually need to modify your Thermonet mat in some way to fully cover your desired heating area. The diagrams on this page will help you to manipulate your Thermonet mat safely and avoid causing any damage during installation.

Cutting the mesh



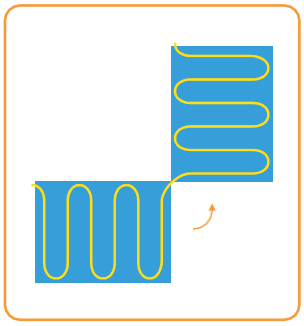
Use scissors to carefully cut the blue mesh

Turn 180°



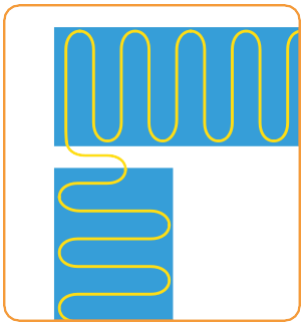
Turn the mat 180° laying parallel to the first run

Turn 90°



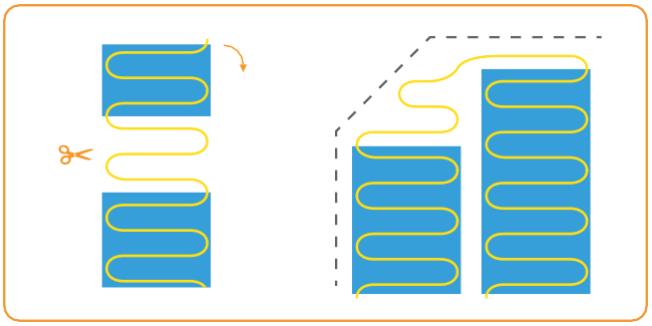
Turn the mat 90° for a more simple turn

Alternative 90°



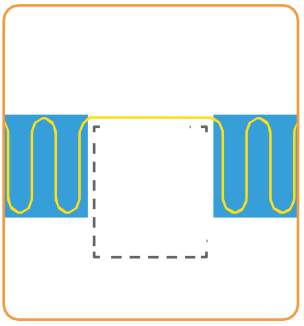
Release cable from the mat for an alternative 90° turn

Staggered 180°



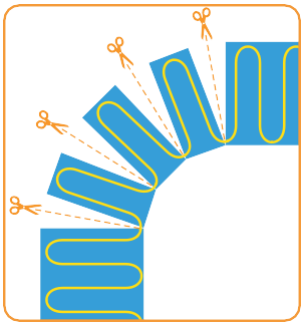
Remove the cable from the mesh and tape in place for awkward areas such as angled walls

Avoid an obstacle



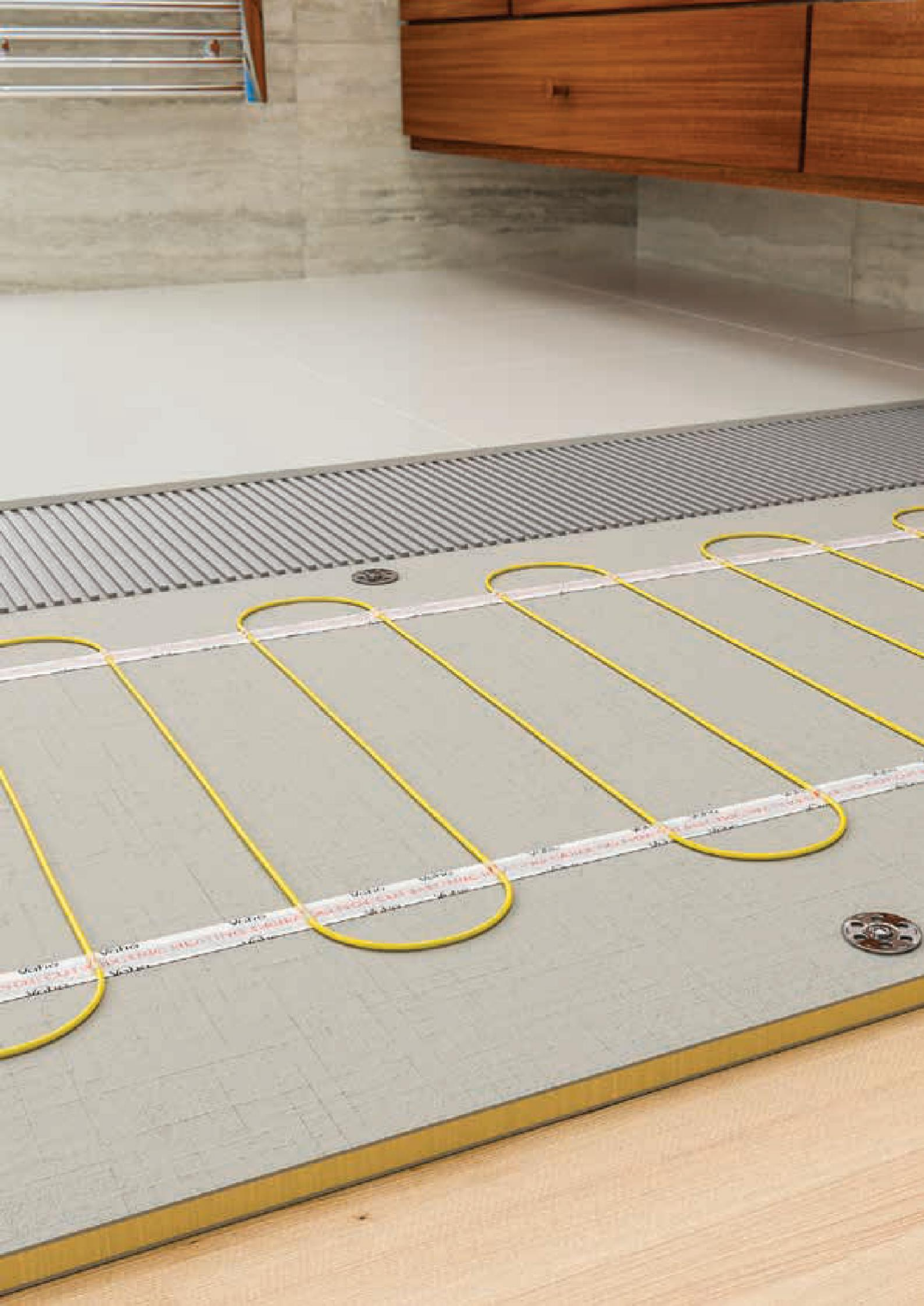
Remove the mesh to avoid permanent fixtures

Curved fan turn



Cut mesh into sections to make a curved fan turn

NEVER CUT THE HEATING CABLE! When performing any of these mat modifications it is vital that you do not cut or damage the heating cable. Damaging or shortening the cable will void your warranty.

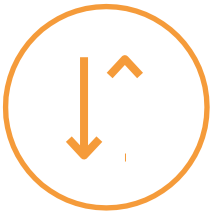


Vario is the traditional underfloor heating cable kit solution designed for installing in small, awkward areas.

Vario cable kits include the most advanced electric underfloor heating cable available and our unique patented fixing strip, which is designed to speed up installation and save time on site.

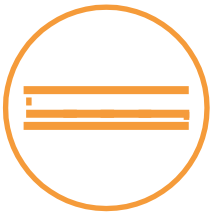
Lifetime Warranty

We are so confident of the quality of Vario Underfloor Heating cable that we give each system a warranty that lasts a Lifetime with 3 year warranty on our Thermostats.



Variable output underfloor heating

Using Vario cable allows you to space the heating cables yourself to achieve a desired layout and heat output per m².



Advanced TwistedTwin heating cable

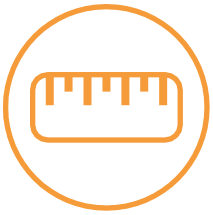
Our superior advanced TwistedTwin heating cables are unique; you will find thinner cables, but you won't find better quality.

Strong bond to the substrate

The adhesive used in the Vario fixing strip is a high-grab, pressure activated adhesive that bonds permanently to the substrate and the heating cable.

Ideal for irregular shaped areas

The layout is totally flexible and can be designed to fit around furniture and fixtures in small or irregular shaped rooms.



Pre measured cable spacing

The Vario fixing strip has pre measured 10mm cable spacing markers that remove the need to measure and mark your substrate, saving you time.

Vario
UNDERFLOORHEATING

Unique, patented fixing strip with high grab adhesive

3.5mm (3/8in.) thick TwistedTwin underfloor heating cable

IP68 Protection rating
Safe in wet locations

4mm (3/8 in.) Low profile cold tail connection cable

Available in kits designed to heat areas from 1 - 18m² (10.7ft² – 193.75ft²)

Hassle free cable installation with the unique patented fixing strip

Thermonet America's patented Vario fixing strip is pre measured to speed up installation. The aggressive, pressure activated adhesive grips your substrate and heating cable, fixing them in place for easy tiling. The Vario system is designed to go directly below the tiles.

How to calculate Vario cable spacing

$$\frac{\text{AVAILABLE FLOOR SPACE (m}^2\text{) X 100}}{\text{CABLE KIT LENGTH (m)}} = \text{CABLE SPACING (cm)}$$

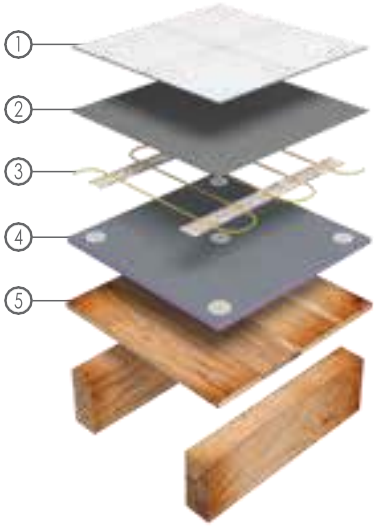
CE green energy SAFETY TESTED BEYOND 25000 ZEROEMF TWISTEDTWIN™ TECHNOLOGY LIFETIME WARRANTY

Vario heating cable kits

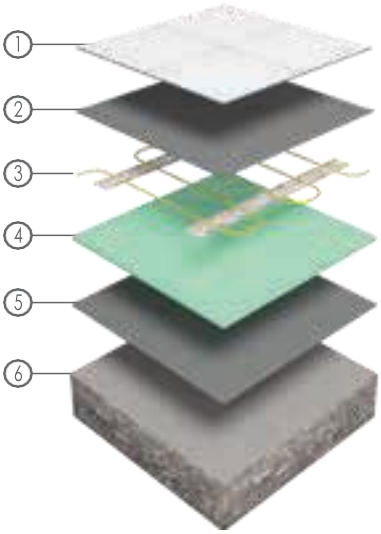
Kit includes: Vario Heating Cable, Programmable Thermostat (5220A), Floor Temperature Sensor, Sensor Conduit, Cable Monitor, Cloth Tape, Patented Premeasured Fixing Strip, Installation Guide with Warranty Form.

Stock Code	Description	Length (m)	Area (ft^2)*	Output (W)	Resistance (Ω)	Price ($)	Price/sq. ft
109012	Kit 2 inc. Thermostat	14 (46ft)	12	185	286	186.00	15.50
109018	Kit 3 inc. Thermostat	22 (72ft)	18	300	176	208.00	11.56
109025	Kit 4 inc. Thermostat	33 (108ft)	25	450	118	265.00	10.60
109031	Kit 6 inc. Thermostat	44 (144ft)	31	600	88	288.00	9.30
109037	Kit 8 inc. Thermostat	55 (180ft)	37	750	71	308.00	8.33
109050	Kit 10 inc. Thermostat	66 (216ft)	52	900	59	368.00	7.08
109062	Kit 12 inc. Thermostat	86 (282ft)	62	1200	44	407.00	6.57
109075	Kit 15 inc. Thermostat	110 (361ft)	76	1500	35	452.00	5.95
109100	Kit 18 inc. Thermostat	132 (433 ft)	102	1800	29	550.00	5.40
109125	Kit 21 inc. Thermostat	154 (505 ft)	127	2100	25	614.00	4.84
109150	Kit 24 inc. Thermostat	176 (577 ft)	153	2400	22	663.00	4.34

For a kit without a thermostat, deduct $216.00 incl. GST from the RRP cost.
* Based on 150 watts per square meter.

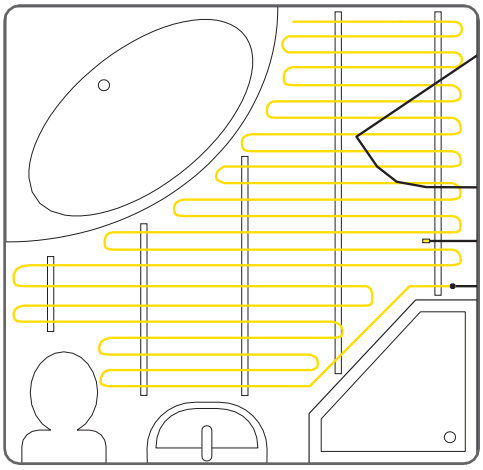


1. Tiled floor finish
2. Flexible tile adhesive
3. Vario cable kit
4. Coated insulation
5. Timber substrate

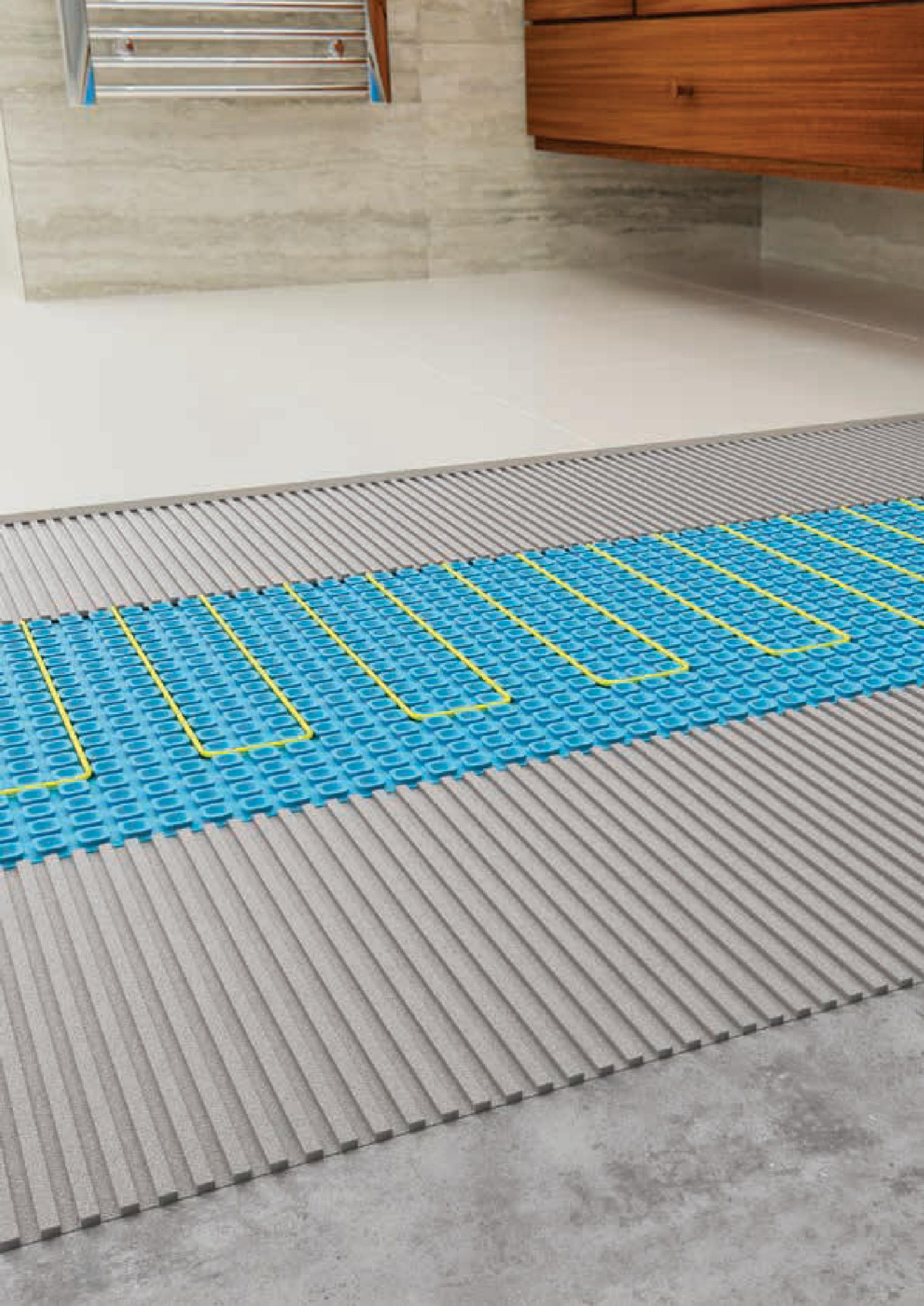


1. Tiled floor finish
2. Flexible tile adhesive
3. Vario cable kit
4. Uncoated insulation
5. Flexible tile adhesive
6. Prepared concrete substrate

Easy Installation in small areas



Typical Vario™ heating cable configuration in a small bathroom using the fixing strip.



Vario PRO is the fast and easy way to create a warm, comfortable floor that's protected from tile delamination and cracks

Vario PRO is the professional combined underfloor heating and uncoupling solution for tiled floors. The fast track installation is quick and easy and creates a floor built to last.

Underfloor heating

Vario ProMat is designed to make it easy to install electric underfloor heating and an uncoupling membrane with one fast track solution.

Uncoupling layer

Vario ProMat neutralises the stress caused by different rates of expansion and contraction in a tiled floor. This minimises the risk of tile delamination and cracking.

Superior vapour management

The studs in the Vario ProMat allow water vapour to escape effectively. This means you can save more time by tiling over a substrate that is not fully cured.

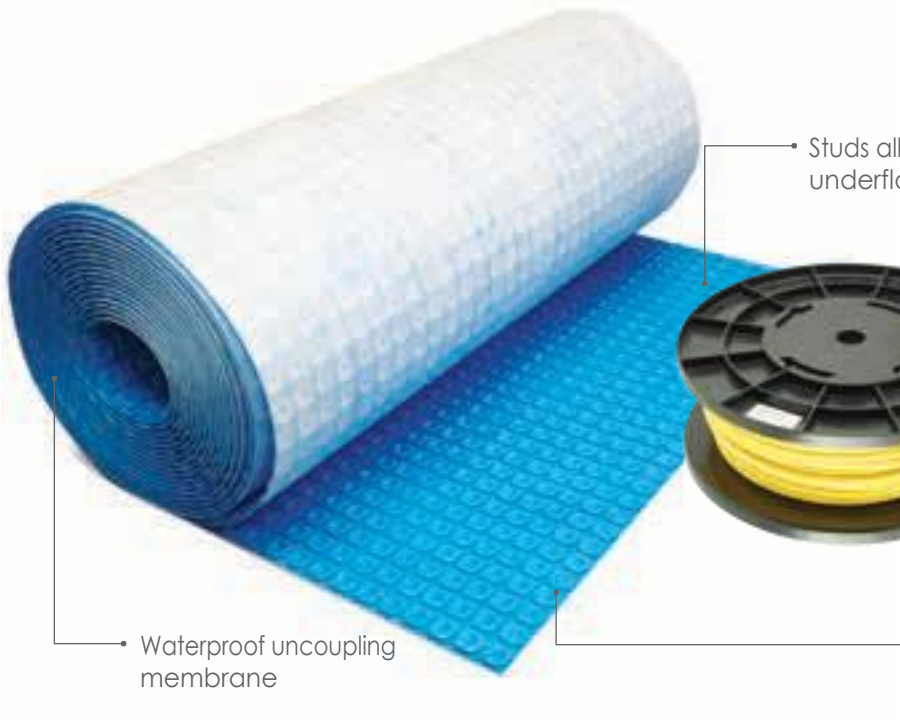
Easy waterproofing

Vario ProMat is totally waterproof, and by using Vario PRO sealing tape on edges and penetrations you can create a wetroom quickly and easily.

Efficient load distribution

Heavy loads are no problem for floors that include a layer of Vario PRO. The stud structure transfers the load to the sub floor eliminating the risk of cracks.

VarioPRO
UNDERFLOOR HEATING



- IP68 Protection rating
  Safe in wet locations

Combined underfloor heating and uncoupling system

Vario PRO is a proven combined electric underfloor heating and uncoupling system. Rated for extra heavy use with the Robinson test, Vario PRO is one of the most robust heated uncoupling systems available. A valuable time saver when compared to traditional underfloor heating and uncoupling systems.

Why do I need an uncoupling layer?

The problem:

All floors, especially new ones, expand and contract with changes in the temperature of the building.

Typically, a floor tile will expand and contract at a different rate to the tile adhesive and sub floor below, resulting in cracked tiles and delamination (tiles coming away from the floor).

The solution:

Introducing a layer of Vario PRO uncoupling membrane helps to prevent cracks and delamination by neutralising the stress between the tiled surface and the sub floor.

Vario PRO cannot prevent damage from sheer movement.

LIFETIME WARRANTY
TWISTED TWIN™ TECHNOLOGY
ZEROEMF
green energy
CE
SAFETY TESTED BEYOND 2500V

VarioPRO
UNDERFLOOR HEATING

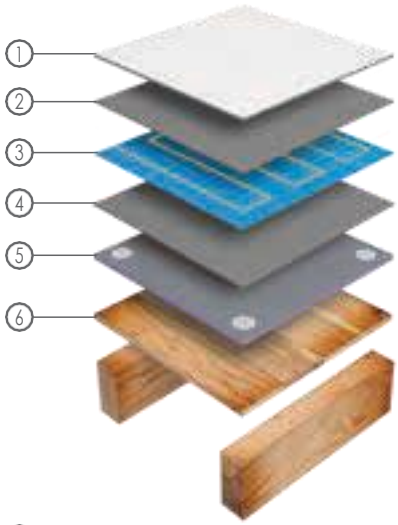
Vario PRO heating cable

Stock Code	Length (m)	Area (m^2)	Output (W)	Resistance (Ω)	RRP $ Excl.	RRP $ Incl.
109012	12	0.8	150	352.7	122.73	135.00
109018	18	1.2	225	235.1	180.91	199.00
109025	25	1.6	300	176.3	271.82	299.00
109031	31	2.1	375	141.1	299.09	329.00
109037	37	2.6	450	117.6	344.55	379.00
109050	50	3.2	600	88.2	444.55	489.00
109062	61	3.9	750	70.5	571.82	629.00
109075	75	4.8	900	58.8	680.91	749.00
109100	100	6.4	1200	44.1	908.18	999.00
109125	125	8.0	1500	35.3	1,071.82	1,179.00
109150	150	9.6	1800	29.4	1,271.82	1,399.00
109200	200	12.8	2400	22.0	1,690.00	1,859.00

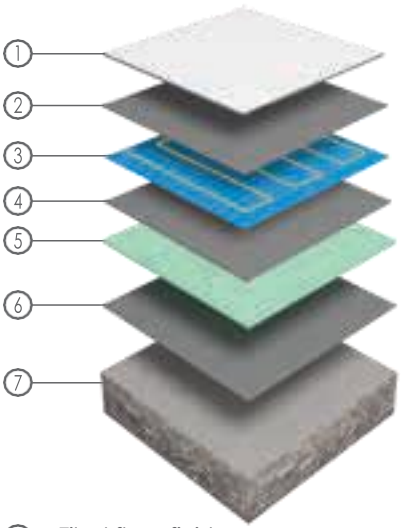
Remember to order your chosen heating cable, a thermostat and enough Vario ProMat for your floor!

Installation accessories

Stock Code	Description	Size	Unit	RRP $ Excl.	RRP $ Incl.
109500	Vario PROMat Uncoupling	15 x 1m	Roll	522.73	575.00
109505	Vario PROMat Uncoupling	5 x 1m	Roll	208.18	229.00
109510	Vario PRO Sealing Tape	10m	Roll	59.09	65.00



1. Tiled floor finish
2. Flexible tile adhesive
3. Vario PRO system
4. Flexible tile adhesive
5. Econoboard coated insulation
6. Timber substrate



1. Tiled floor finish
2. Flexible tile adhesive
3. Vario PRO system
4. Flexible tile adhesive
5. Econoboard uncoated insulation
6. Flexible tile adhesive
7. Concrete substrate

Underfloor Heating FAQs

We have put together a range of answers to the most frequently asked questions about Underfloor Heating systems.
If you have a question that isn't answered here please give us a call.

What happens if it goes wrong or breaks under my floor?

There are no moving parts to an electric underfloor heating system and cable failures are extremely rare, if installed correctly. A damaged cable can usually be located and repaired with minimal disruption.

Can I join two or more heating cables or mats to fit a larger area?

No, the heating cables or mats cannot be joined together however two or more elements can be connected in parallel to one Thermostat.
When connecting multiple cables or mats you need to ensure that the total load does not exceed the total load of your thermostat.

Can I cut the heating cable if I have excess?

No - never. Cutting the heating cable will alter the resistance and cause the element to overheat. If you cut the cable by accident, please call our technical helpline for assistance. Technical number is: 1300 989 464

How much does it cost to run an electric underfloor heating system?

Every system installation is different due to the insulation value of the property, type of flooring used and the level of insulation below the heating system. For an estimated running cost see page 13.

Do I need a contactor/snubber?

Thermonet America thermostats have a max load of 16amps. If your system
exceeds this total load you will require a suitably rated contactor and snubber to ensure a safe and functional circuit.

Can I extend or shorten the cold tail?

Yes! The low profile cold tail can be shortened or extended up to 50m with a suitably rated twin and earth cable. We recommend that connections are accessible.

Can I install Underfloor Heating in the shower?

If your shower floor is tiled, yes you can run the heating cables into the shower area as this helps to dry out the shower and prevent mould growth. It is recommended that you do not start or end in the shower.

What should I do if I have left-over heating cable?

You should always measure the room accurately and choose a system that covers the available heating area. If you do have extra cable you can run it around the edge of the room (Min. spacing 50mm), up the walls or in the shower (behind the tiles if tiling with a cement based flexible tile adhesive). The heating cannot be shortened and all yellow cable must be covered by a cement-based tile adhesive.

Is electric heating safe in bathrooms? What about the water?

It is perfectly safe to install a Thermonet system in a bathroom. Thermonet is protected to IP68 standards which means it can be placed in any zone of a bathroom with no issues. The thermostat, however, should be installed away from water sources.

Do I need to use a special adhesive to fit tiles over underfloor heating?

You will need to use a cement based flexible tile adhesive, however there is a wide variety available so ask your manufacturer or tile retailer for guidance.

How do I control my underfloor heating system?

Every system should be connected to a Thermostat. You can have a simple, manual on/off version, but we recommend the use of a programmable heating thermostat with a heating schedule for total system control and greater efficiency.

Do I need to include thermal insulation as part of my floor?

We recommend the use of insulation as it can halve running costs. The underfloor heating systems will still be able to work without the use of insulation however it will increase the heat up times and running costs.

Can underfloor heating be used as the primary heat source?

Yes, if you cover at least 80% of the floor area with the underfloor heating system, this can be used as the primary heat source in the room.

How long will it take for the floor to heat up?

Every situation is different due to the insulation value of the property, type of flooring used and the level of insulation below the heating system. For an estimated heat up time see page 12.

What floor covering can I have on top of underfloor heating?

Underfloor Heating can be installed below almost any floor covering. There are different systems and build-ups for the different floor coverings so it is important to select the most suitable system. Refer to pages 16-17. We recommend you check with the flooring manufacturer to ensure your floor covering is compatible with floor heating.

How long should the floor heating be left on for?

The length of time depends on your lifestyle, the system used and the desired temperature.

Does floor heating cause any problems to the tiles or floor covering?

No - if installed correctly the floor heating does not affect the floor covering.

Who installs underfloor heating?

Our underfloor heating systems are designed to be simple to install and come with a comprehensive installation manual. Often the floor heating is installed by the electrician, tiler, builder or even the home owner. The testing and wiring up of the floor heating needs to be completed by a qualified electrician.

Can you walk on the installed heating cables before the tiles are laid?

Whilst the cable is durable and will handle foot traffic we recommend reducing walking on unfinished floor surfaces to a minimum as a precaution. Avoid putting heavy objects with sharp edges (such as buckets of tile glue) down on the cable. Always ensure the mat monitor is installed and turned on.

Can I turn the heating on to make sure it heats up before the tiles are laid?

No. The heating cable needs to be enclosed in a cement layer to help spread the heat. Turning on the heating before the cement layer is applied will cause the cable to overheat and burn out. The heating cable needs to be tested by a qualified electrician to ensure no damage has occurred during installation.

Does underfloor heating require any maintenance?

No. An electric underfloor heating system does not have any parts that require maintenance. The thermostat will need to be programmed to suit your lifestyle and you can adjust this when you wish to.

What is the difference between single and double conductor heating cables and mats?

A single conductor mat or cable has only one cold tail which needs to be connected to the Thermostat as opposed to a double conductor cable or mat which has a cold tail at both ends of the heating cable that needs to be connected to the thermostat. All of the Thermonet America underfloor heating cables have a single cold tail, making installation quicker and easier.

Can I use my floor heating on 'Off-Peak' electricity?

When using In Slab Heating, you can take advantage of the Off-Peak electricity tariff as heating the slab creates a thermal mass beneath your floor that allows for a slow continuous release of heat. Under Tile and In Screed heating systems have a more rapid heat up and cool down time, therefore are not suitable to be used with Off-Peak electricity.

Are there any special wiring requirements?

Your electrician will need to ensure that the amperage of the circuit is suitable for the size of the floor heating system that is being installed. The floor heating must also be installed on a RCD protected circuit.

Does the floor sensor have to be installed in the conduit?

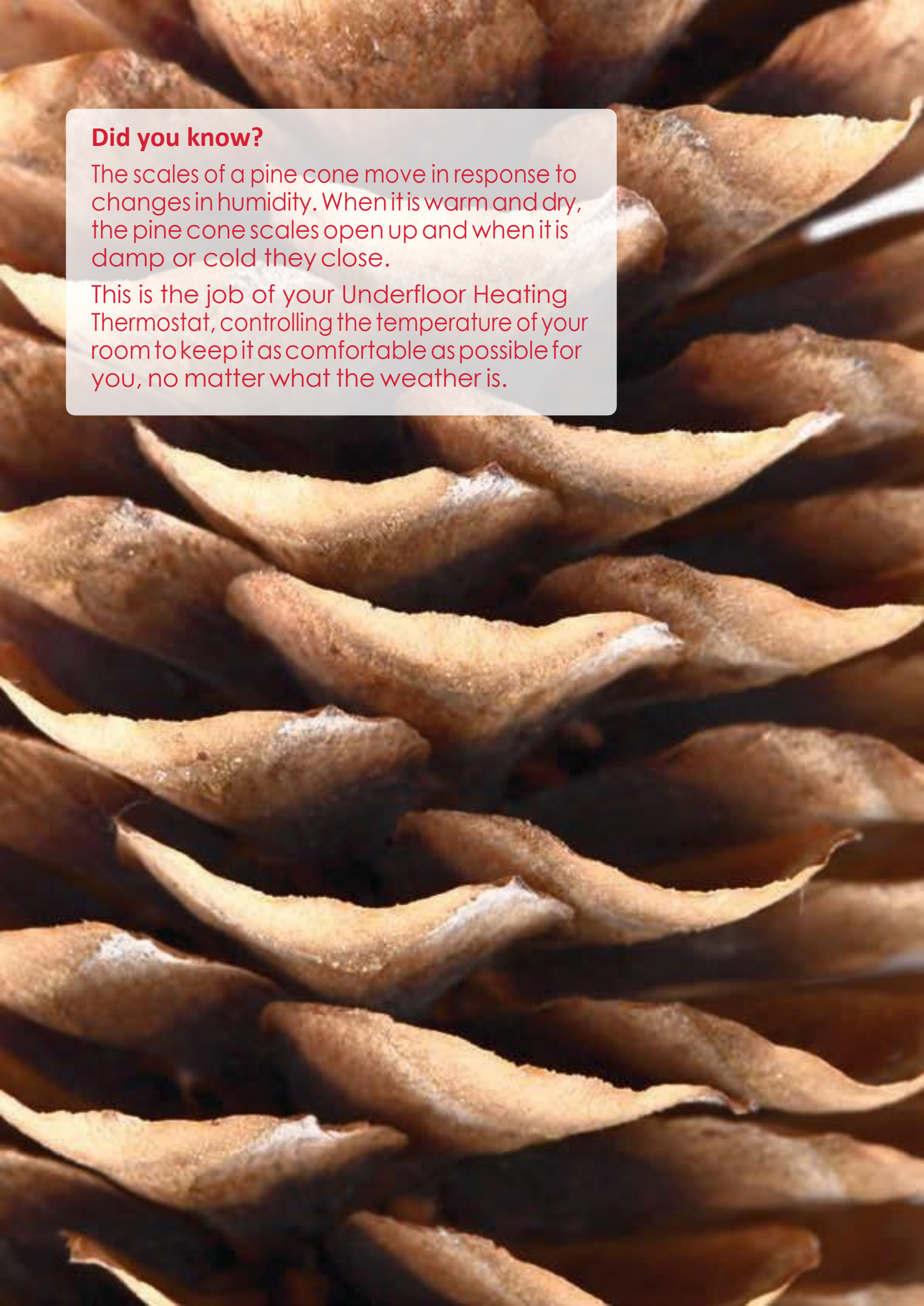
We recommend the use of a conduit for the floor sensor so that in the event of a floor sensor failing or the thermostat being upgraded, the floor sensor can be replaced without damaging the floor covering. If this is not possible we recommend installing a second floor sensor as a spare.

Is the underfloor heating installed above or below the waterproofing?

To ensure a fully waterproof substrate it is recommended to lay the floor heating over the waterproofing. In a screed application, where the waterproofing is on top of the screed, an In screed heating system can be laid before the waterproofing.

What is the advantage of an In Screed system over Under Tile system?

When floor heating is installed below the screed, it uses the screed as a heat bank, providing efficient heat in the room. It also provides a clear smooth substrate for the tiler to lay the tiles onto.



Did you know?

The scales of a pine cone move in response to changes in humidity. When it is warm and dry, the pine cone scales open up and when it is damp or cold they close.

This is the job of your Underfloor Heating Thermostat, controlling the temperature of your room to keep it as comfortable as possible for you, no matter what the weather is.

Underfloor Heating Controls and Accessories

Efficient heating controls help you save money

Our thermostats provide accurate floor and ambient temperature control combined with a heating schedule that only heats when you need it and helps to cut your running costs.

- Create an on demand heating schedule to provide heat only when you need it
- Accurate ambient and floor sensors for total control over your heating system
- Easy installation into the mains electricity supply
- Conduit provided for floor sensor installation
- Range of models available to suit your home interior
- al relay Thermotouch 4.3dC designed to control floor heating and an additional appliance

As part of our environmental focus, we will plant one tree for every Thermostat sold

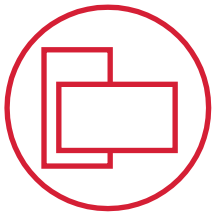
thermotouch
INTELLIGENT HEATING CONTROLS

Have full control over your electric underfloor heating system with the new Thermotouch fully programmable glass thermostat

Thermotouch 7.6iG is 7 day programmable thermostat comes with an ice white or piano black glass fascia.

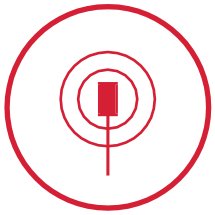
Fully programmable

The Thermotouch 7.6iG Programmable Thermostat features a 7 day, 6 event heating schedule with 6 heating events on the weekend.



Portrait or landscape mounting

Thermotouch 7.6iG is supplied with a portrait backing plate as standard. However, if required you can purchase the landscape mounting plate.



Sensor mode

Thermotouch 7.6iG is supplied with a floor sensor probe and an option for using an ambient sensor to ensure total control over your heating system.

Manual mode

Thermotouch 7.6iG also features a simple to use manual function that allows you to manually control the temperature of your underfloor heating.

thermotouch
INTELLIGENT HEATING CONTROLS

THREE YEARS WARRANTY 3

Thermotouch 7.6iG Glass Programmable Thermostat

The 7.6iG Glass Programmable Thermostat features a 7 day, 6 event heating schedule including 6 heating events on each day of the weekend. The piano black and ice white glass fascias and clean lines are a perfect match for any modern interior.

Stock Code	Colour	Size W x H x D (mm)	IP Rating	Max Load	RRP $ Excl.	RRP $ Incl.
5220A*	Ice White	85 x 115 x 46 (26mm in wall)	IP30	16A	271.82	299.00
5226A	Piano Black	85 x 115 x 46 (26mm in wall)	IP30	16A	271.82	299.00

Stock Code	Accessories	Size W x H x D (mm)	RRP $ Excl.	RRP $ Incl.
5221	White Landscape Mounting Plate	115 x 86 x 5	20.00	22.00
5223	Black Landscape Mounting Plate	115 x 86 x 5	20.00	22.00

*5220A Thermostat included as standard in all Underfloor Heating T-Kits - pages 21, 29, 32 and 37.

Thermostat FAQs

We have put together a range of answers to the most frequently asked questions about Underfloor Heating Controllers.
If you have a question that isn't answered here, please give us a call.

What is a floor sensor?

A floor sensor is a small probe that is installed beneath the floor, between two runs of heating cable. This is connected to the Thermostat and gives an accurate reading of the floor temperature.

What temperature should I set my underfloor heating at?

Every situation is different however it is recommended to set your underfloor heating to 24°C to begin with. After testing for several days increase or decrease the temperature to find your comfort temperature. Please note a decrease of 1°C may not affect the comfort or warmth of the floor enough to make it noticeable but can help to reduce running costs.

What is a contactor/snubber?

A contactor is designed to switch loads greater than 16A on one thermostat. The snubber must also be connected to absorb any electrical surges that could disrupt the memory of the thermostat.

Do I need a contactor/snubber?

Thermonet America thermostats have a max load of 16A. If your system exceeds
this total load you will require a suitably rated contactor/snubber to ensure a safe and functional circuit.

Can I control multiple zones with one controller?

No, each zone that you want to have individual control over needs to have it's own separate controller.

What is an Eco Temperature?

The Eco temperature is a lower temperature that is set for the 'Off' period on the Thermostat. This is normally set at a temperature between 15-18°C. This means that the heating will still come on if the temperature drops below this, even during an 'Off' period, ensuring the floor heating will not be trying to heat from freezing for each 'On' period.

How much does it cost to run an electric underfloor heating system?

Every system is different because of the insulation value of the property, type of flooring used and the level of insulation below the heating system. For an estimated running cost see page 13.

Do I need to purchase a floor sensor?

No, every Thermostat is supplied with a compatible floor sensor so this does not need to be purchased separately.

What is the difference between an underfloor heating controller and a towel rail controller?

An underfloor heating controller (Thermostat) allows you to have control over the temperature of your floor whereas a towel rail controller is only a timing device (On/Off) and does not allow for any control over the temperature.

Can I control my underfloor heating using C-Bus?

Yes, ensure that you purchase one of the manual thermostats (5215 page 59 or 5250 page 60) with your underfloor heating and this can be connected to and controlled by your C-Bus system.

Can I control my underfloor heating and towel rail from one controller?

Yes, with our Thermotouch 4.3dC dual control thermostat, you can individually control both your underfloor heating and towel rail from the single controller.

What is the flexible conduit for? Do I need to install it?

We recommend that the floor sensor is installed in the flexible conduit so that if the floor sensor fails or if you choose to upgrade your thermostat later the floor sensor can be removed and replaced without damaging the floor covering.

Thermonet America

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LEETON
NSW 2705

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Fax | 1300 655 532
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Web | www.thermonetusa.com

Thermogroup

That little bit extra...

TGFG2020