



 radiant  
HEATING

# Underfloor Heating Kits



#### INVISIBLE HEAT

A natural feeling of warmth with no fans or ducts



#### ON DEMAND

Fast to warm up (circa 30 minutes with insulation boards)



#### WARM FLOOR

Warmth where you need it the most



#### ASTHMA + ALLERGY FRIENDLY

No air or dust movement from ducted heating



#### BETTER BATHROOM DESIGN

As heat lamps are not required exhaust fans can be placed over showers



#### DRY FLOOR

The heat dries floors and reduces chances of mould and cleaning requirements



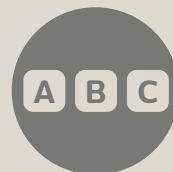
#### ECONOMICAL TO RUN

About 4-5c / square metre per hour (at average household electricity prices and room size)



#### FULLY PROGRAMMABLE

Time AND temperature control in one touch screen unit



#### EASY INSTALLATION

Most versatile installation method available. You can DIY the heating element



#### SLEEK CONTROLLER

Highest quality touch-screen wall controller with backlight and 24/7 timer functionality



#### TEMPERATURE CONTROL

Floor or room sensor to thermostatically control by temperature



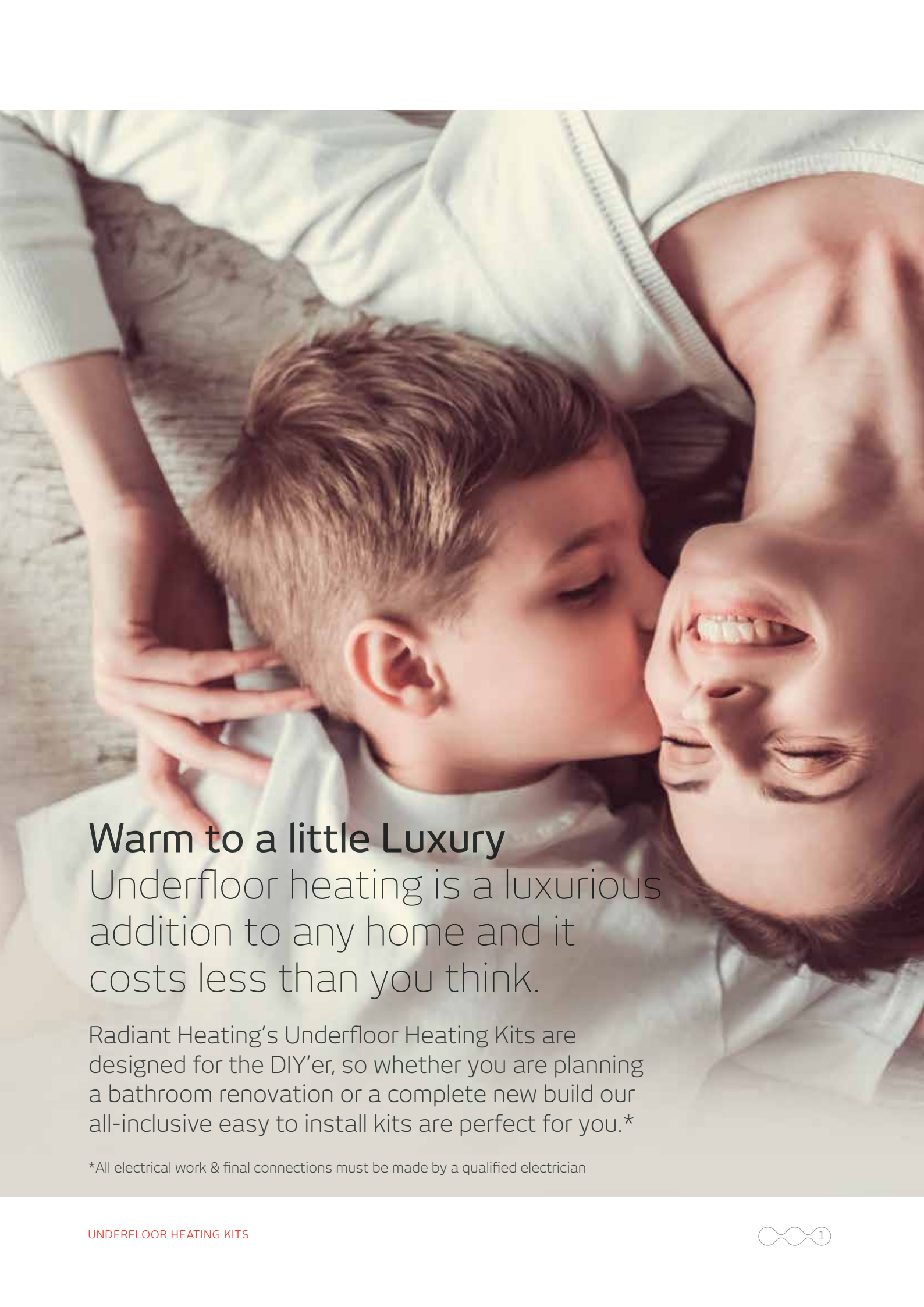
#### SAFE

IPX7 rated cable so can even be installed below the shower if required



#### MAINTENANCE FREE

Once installed it is maintenance free



## Warm to a little Luxury

Underfloor heating is a luxurious addition to any home and it costs less than you think.

Radiant Heating's Underfloor Heating Kits are designed for the DIY'er, so whether you are planning a bathroom renovation or a complete new build our all-inclusive easy to install kits are perfect for you.\*

\*All electrical work & final connections must be made by a qualified electrician



DANISH MANUFACTURED  
CABLE MEANS QUALITY  
AND RELIABILITY

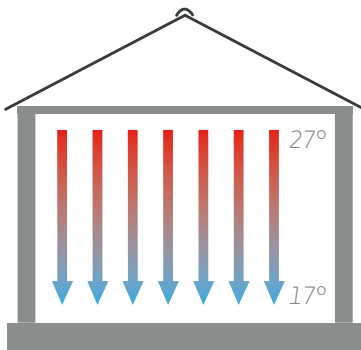


CABLE GUARANTEED  
FOR 10 YEARS

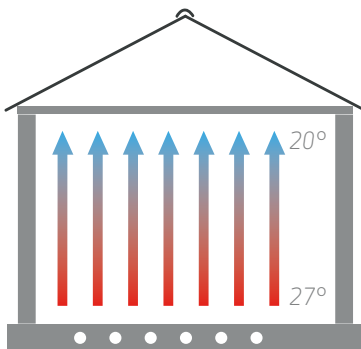


AGENTS IN WA,  
SA, VIC AND NSW

## Why choose Radiant underfloor heating?



*Reverse cycle heating generates warmth at the ceiling level, and as heat rises, struggles to adequately warm lower areas.*



*Underfloor heating gives you heating at the floor level, directly where you need it.*

### Low-energy, low cost, intelligent heating

Underfloor heating can be installed in both renovation and new-build projects, both under tile and in screed. Any sub-floor suitable for tiling should be suitable for the under-tile heating system.

Underfloor Heating is the most comfortable form of heating, radiating a natural, even temperature across the entire floor. Whilst currently extensively used in bathrooms, it is also becoming much more popular to provide the main heating system for living areas. It can be used anywhere in the house to create ambient warmth and that luxury warm feeling under foot. Any ceramic or porcelain tile, stone, marble and travertine should be suitable to have electric underfloor heating

Additionally, electric underfloor heating for living areas is the perfect partner to P.V. solar panels. Combining the two allows you to utilise the energy

you generate yourself for free during the day to heat the floor and the home, and with good insulation the room should stay warm late into the evening! In most cases where underfloor heating is installed across the majority of the free floor area, no other heating is required.

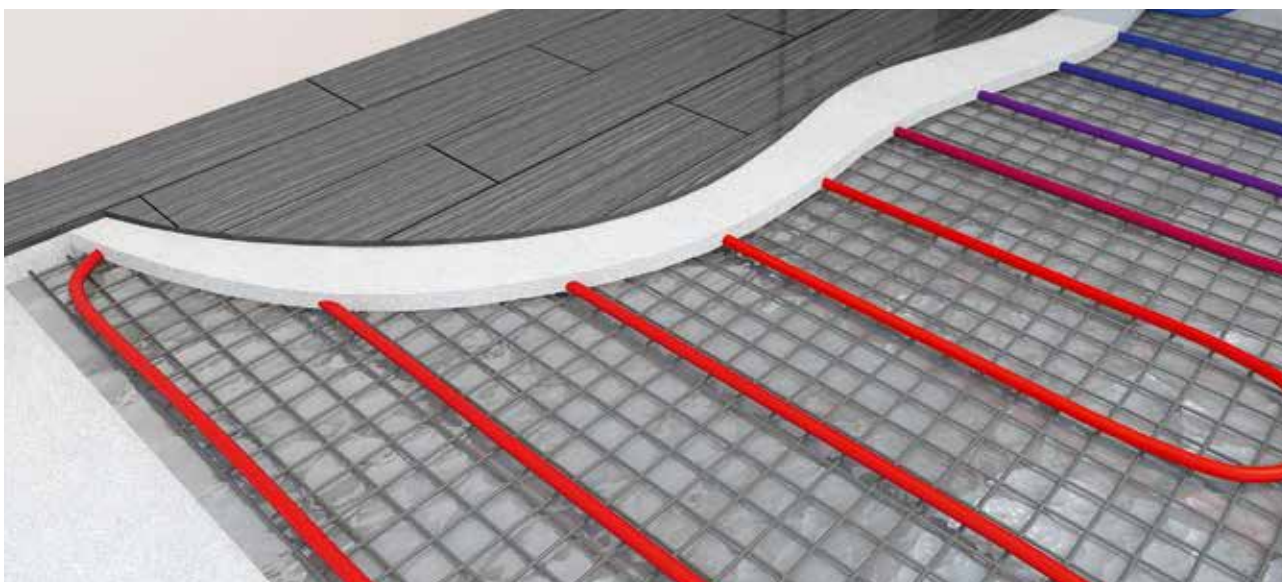
Modern under floor heating also provides many advantages over traditional ducted heating and reverse cycle air conditioning.

Where large surfaces such as the floor exist, it is possible to achieve ideal comfort conditions with a slightly lower ambient air temperature, resulting in more comfortable conditions, greatly reduced dust circulation and lower energy usage.

These advantages are even greater in rooms where traditionally cold floor surfaces such as tiles, stone or polished concrete are used, since these become your heating system rather than creating drafts and cold spots.



Our DIY Floor Heating kits are a great option if you are renovating a bathroom or a room which is going to be tiled or screeded. This option will save you the installation costs and using our detailed instructions you will have this installed in no time.



Modern under floor heating also provides many advantages over traditional ducted heating





# Under tile floor heating kit

## UNDER TILE KIT INCLUDES:

500MM WIDE UNDER TILE CABLE MAT - WITH SELF-ADHESIVE BACKING

TOUCH SCREEN FLOOR/AIR SENSING THERMOSTAT

FLOOR HEATING SENSOR

CABLE ALARM

CLOTH DUCT TAPE

UNDER TILE FLOOR HEATING DIY INSTRUCTIONS



Our under-tile floor heating kit is perfect for putting floor heating under tiles, where the floor is not going to be screeded.

The cable mat is installed on the base surface and is then covered with the tile adhesive and tiles. The thin 3mm cables means that in many cases the tiler only has to use a little bit of extra adhesive. The mats are 500mm wide and are easily installed by cutting the matting (NOT THE CABLE) and snaking the mat backwards and forwards filling

in the area to be heated. NOTE where large heavy tiles are being used it is advisable to first cover the mats with a thin levelling compound to protect them. **This system is the most popular choice for bathrooms in VIC and TAS where bathrooms are generally not screeded. It is also very popular for living areas in all states.**

## Under tile mats for bathrooms 200w/sqm

PRODUCT CODE	MAT SIZE	AREA COVERAGE	HEAT OUTPUT
UTCMK200-200W	0.5 x 2.0m / 1.0 sqm	1.2 - 1.7 sqm	200 watts
UTCMK200-300W	0.5 x 3.0m / 1.5 sqm	1.8 - 2.2 sqm	300 watts
UTCMK200-400W	0.5 x 4.0m / 2.0 sqm	2.3 - 2.7 sqm	400 watts
UTCMK200-500W	0.5 x 5.0m / 2.5 sqm	2.8 - 3.2 sqm	500 watts
UTCMK200-600W	0.5 x 6.0m / 3.0 sqm	3.3 - 3.7 sqm	600 watts
UTCMK200-700W	0.5 x 7.0m / 3.5 sqm	3.8 - 4.2 sqm	700 watts
UTCMK200-800W	0.5 x 8.0m / 4.0 sqm	4.3 - 4.7 sqm	800 watts
UTCMK200-900W	0.5 x 9.0m / 4.5 sqm	4.8 - 5.2 sqm	900 watts
UTCMK200-1000W	0.5 x 10m / 5.0 sqm	5.3 - 6.3 sqm	1000 watts
UTCMK200-1200W	0.5 x 12m / 6.0 sqm	6.4 - 7.5 sqm	1200 watts
UTCMK200-1400W	0.5 x 14m / 7.0 sqm	7.5 - 9 sqm	1400 watts

## Under tile mats for living areas 150w/sqm

PRODUCT CODE	MAT SIZE	AREA COVERAGE	HEAT OUTPUT
UTCMK150-900W	0.5 x 12m = 6 sqm	6.0 - 7.9 sqm	900 watts
UTCMK150-1050W	0.5 x 14m = 7 sqm	8.0 - 8.9 sqm	1050 watts
UTCMK150-1200W	0.5 x 16m = 8 sqm	9.0 - 9.9 sqm	1200 watts
UTCMK150-1350W	0.5 x 18m = 9 sqm	10.0 - 11.0 sqm	1350 watts
UTCMK150-1500W	0.5 x 20m = 10 sqm	11.0 - 12.0 sqm	1500 watts
UTCMK150-1650W	0.5 x 22m = 11 sqm	12.0 - 13.0 sqm	1650 watts
UTCMK150-1800W	0.5 x 24m = 12 sqm	13.0 - 14.0 sqm	1800 watts
UTCMK150-1950W	6sqm + 7sqm = 13 sqm	14.0 - 16.0 sqm	1950 watts
UTCMK150-2100W	2 x 7sqm = 14 sqm	16.0 - 17 sqm	2100 watts
UTCMK150-2250W	7sqm + 8sqm = 15 sqm	17.0 - 18.0 sqm	2250 watts
UTCMK150-2400W	2 x 8sqm = 16 sqm	18.0 - 19.0 sqm	2400 watts
UTCMK150-2550W	8sqm + 9sqm = 17 sqm	19.0 - 20.0 sqm	2550 watts
UTCMK150-2700W	2 x 9sqm = 18 sqm	20.0 - 21.0 sqm	2700 watts
UTCMK150-2850W	9sqm + 10sqm = 19 sqm	21.0 - 23.0 sqm	2850 watts
UTCMK150-3000W	2 x 10sqm = 20 sqm	22.0 - 24.0 sqm	3000 watts
UTCMK150-3150W	10sqm + 11sqm = 21 sqm	23.0 - 26.0 sqm	3150 watts
UTCMK150-3300W	2 x 11sqm = 22 sqm	25.0 - 27.0 sqm	3300 watts
UTCMK150-3450W	11sqm + 12sqm = 23 sqm	26.0 - 28.0 sqm	3450 watts

All of our mats are 500mm wide so when planning how you will lay out the mat, work in 500mm strips.



# In-screed floor heating kit

## IN SCREED KIT INCLUDES:

500MM WIDE IN-SCREED CABLE MAT – WITH SELF-ADHESIVE BACKING

TOUCH SCREEN FLOOR/AIR SENSING THERMOSTAT

FLOOR HEATING SENSOR

CABLE ALARM

CLOTH DUCT TAPE

IN-SCREED FLOOR HEATING DIY INSTRUCTIONS



Our unique in-screed cable is also pre attached to a mat in a similar fashion to the under tile kit and provides an easy way of laying the floor heating cable before the tiler screeds the floor.

This unique product removes a lot of the hassle of installing in-screed heating cable as it is pre-spaced on the mat and does not interfere with the normal

tiling process. This is the most popular choice for bathrooms in NSW, SA and WA where many bathrooms have a screed level done before tiling.



## In-screed kits for bathrooms 200w/sqm

PRODUCT CODE	MAT SIZE	AREA COVERAGE	HEAT OUTPUT
ISCMK200-200W	0.5 x 2.0m = 1.0 sqm	1.2 - 1.7 sqm	200 watts
ISCMK200-300W	0.5 x 3.0m = 1.5 sqm	1.7 - 2.1 sqm	300 watts
ISCMK200-400W	0.5 x 4.0m = 2.0 sqm	2.2 - 2.6 sqm	400 watts
ISCMK200-500W	0.5 x 5.0m = 2.5 sqm	2.7 - 3.2 sqm	500 watts
ISCMK200-600W	0.5 x 6.0m = 3.0 sqm	3.3 - 3.8 sqm	600 watts
ISCMK200-700W	0.5 x 7.0m = 3.5 sqm	3.9 - 4.3 sqm	700 watts
ISCMK200-800W	0.5 x 8.0m = 4.0 sqm	4.4 - 5.2 sqm	800 watts
ISCMK200-1000W	0.5 x 10m = 5.0 sqm	5.3 - 6.3 sqm	1000 watts
ISCMK200-1200W	0.5 x 12m = 6.0 sqm	6.4 - 7.5 sqm	1200 watts
ISCMK200-1400W	0.5 x 14m = 7.0 sqm	7.7-8.9 sqm	1400 watts
ISCMK200-1600W	0.5 x 16m = 8.0 sqm	9.0-10 sqm	1600 watts



## Dual thermostats/timers

If you're considering installing a heated towel rail with your under floor heating, you'll need our dual touch screen thermostat/timer.

The TS8100W-TH-V thermostat (vertical mounted, white surround) is included with all our floor heating kits. In order to upgrade to one of the options below, add the upgrade code to your order.

## Digital touch screen thermostats / timers

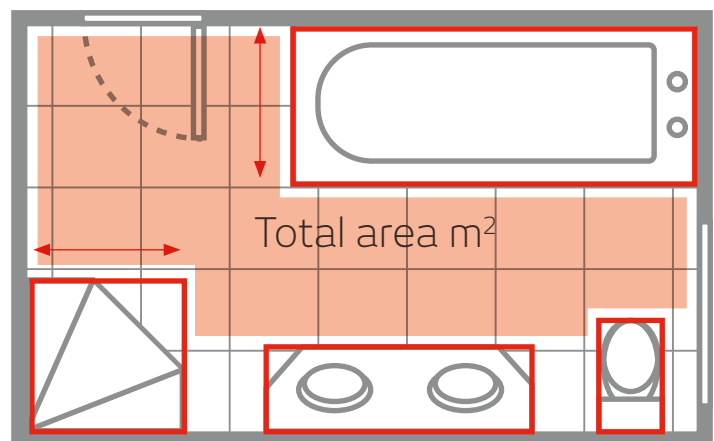
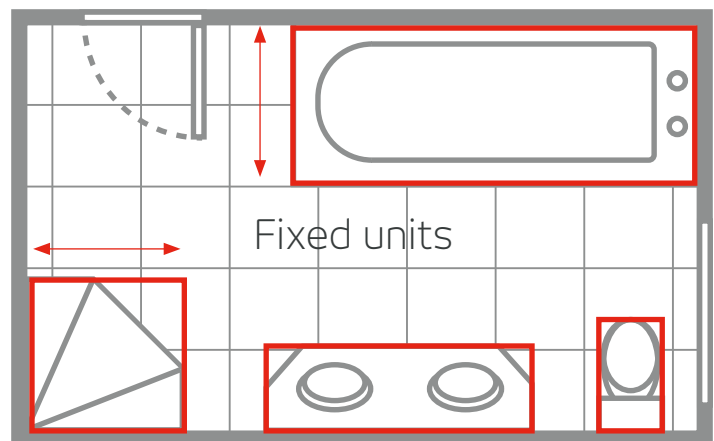
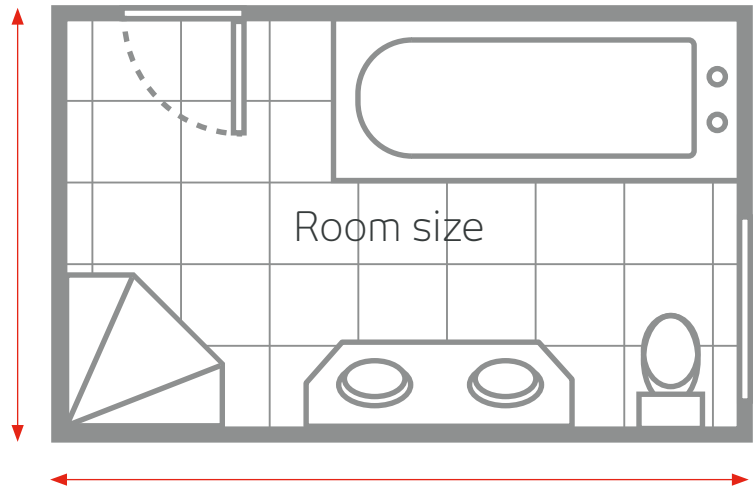
OUR PRODUCT CODE	MOUNTING
TS8100-TH/TIM-DUAL	Standard Touch Screen Vertical Dual Purpose Thermostat & Timer Switch - White
GTSW-DUAL-V	Glass Fronted Touch screen Vertical Dual Purpose Thermostat & Timer Switch - White
GTSB-DUAL-V	Glass Fronted Touch screen Vertical Dual Purpose Thermostat & Timer Switch - Black
GTSS-DUAL-V	Glass Fronted Touch screen Vertical Dual Purpose Thermostat & Timer Switch - Silver
GTSW-DUAL-H	Glass Fronted Touch screen Horizontal Dual Purpose Thermostat & Timer Switch - White



## Calculating your project

Plan the mat layout. This is a vital step and **MUST** be done correctly to ensure that all the mat is used up. Once the mat has been unrolled and cut it cannot be returned.

Measure the area to be heated in m<sup>2</sup>. Do not include areas taken up by fixed objects such as baths, showers and kitchen units. If the calculated heated area is smaller than the chosen mat size STOP and return and exchange for the correct mat size. The mat width is 50cm. You should mark out the layout plan on a drawing - see examples.



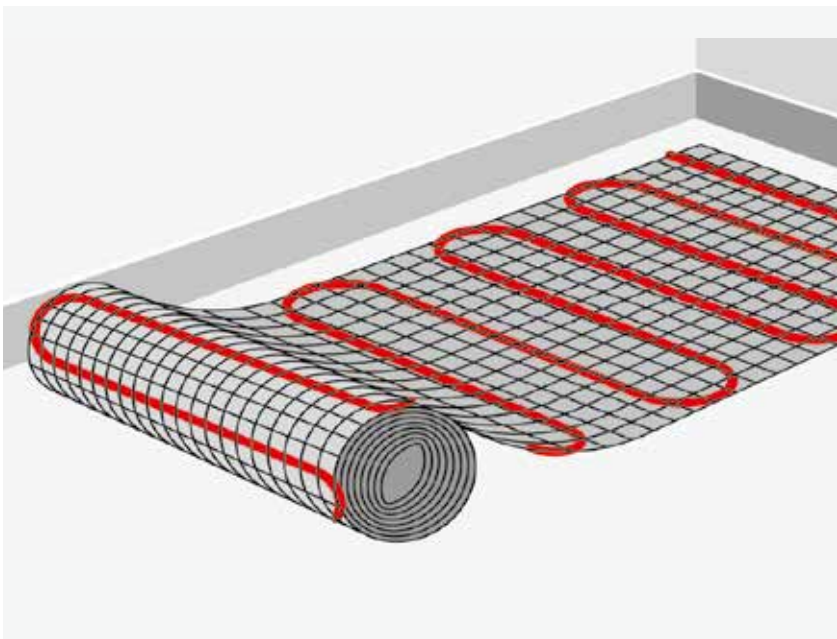
## Underfloor heating plan

This image shows a full page of graph paper. A grid of small squares covers the entire area. In the top-left corner, the word "Sketch" is written in a simple, black font. The rest of the page is empty, providing a space for drawing or sketching.



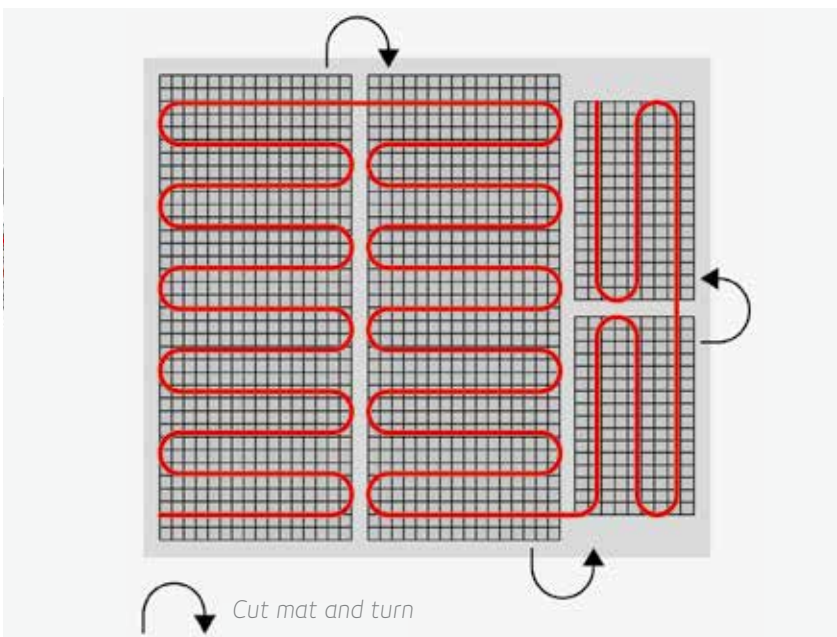
## Installing your heating kit

Only when you have calculated that the mat will fit into the room should you begin to lay.



1

Beginning at the corner closest to where the thermostat is located, position the mat ready to start rolling out.



2

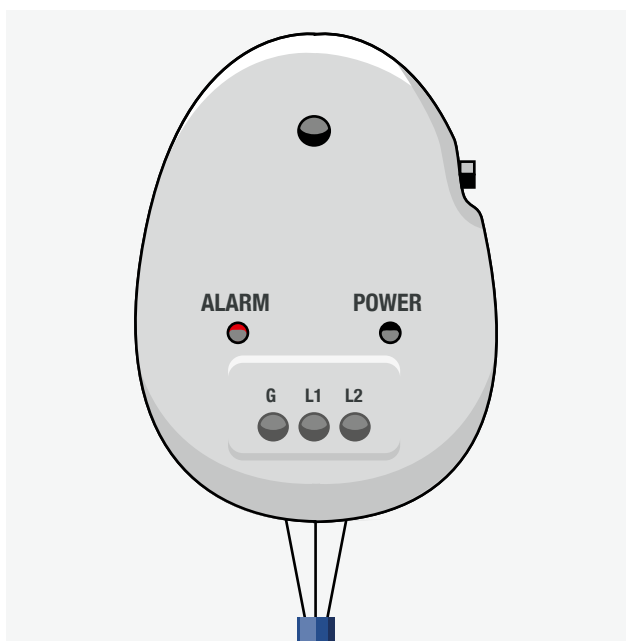
From the starting point, begin rolling out the mat CABLE SIDE DOWN TO THE FLOOR.

When you have done one full run and reach the opposite corner of the room cut through the mesh. DO NOT CUT THROUGH THE CABLE.

Turn the mat through 180° and roll the mat back the other way.

Continue this process until all of the mat is used up.





3

Included in your kit is a cable alarm. Connect and switch on the cable alarm prior to tiling or covering with self-levelling screed. The cable alarm must be turned on at all times when tiling or when any other trades are working in the room.

## FAQs

### What size heating kit do I need?

You should aim to cover between 80-95% of the free floor space of the room. Covering less than 80 % of the FFS means you may end up with cold spots on your floor. We recommend that you measure the intended area to be heated and remove 10% of your total measurement to ensure that you don't order too much.

### What wattage do I need?

If you would like to heat a standard living room which is well insulated, 150 watts per sqm.

For bathrooms we always recommend using the 200 watt / sqm mats due to the limited floor space available.

### If the heating cable is damaged can it be repaired?

As long as the tiler is careful and you use the cable monitor provided, this should not happen. On the rare occasion that this might occur, Radiant Heating have a network of repair specialists that can diagnose and repair where necessary.

### What is the warranty?

We offer a 10 year warranty on the heating cables/ mats and 5 year warranty on the thermostats.

### What maintenance is required?

The system is basically maintenance free as there are no moving parts to wear, apart from the thermostat, which is easy to replace.

### Is the system safe?

Yes. The cable is double insulated and is IPX7 rated making it safe for wet areas.

### How hot does the floor get?

To maintain a 21°C air temperature the floor temperature would be approximately 25°C or approximately 4°C above the desired room air temperature.



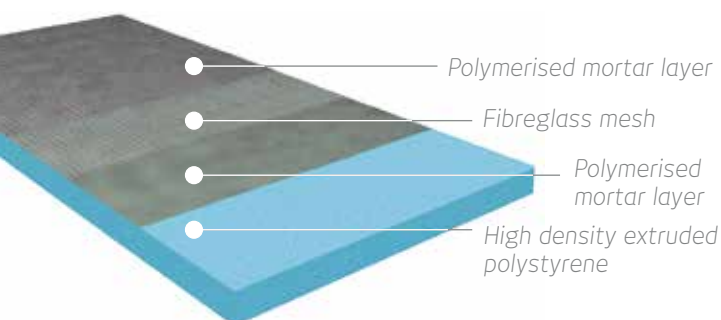
# ThermaBoard underfloor heating insulation board

Extruded polystyrene is one of the most efficient insulation materials available, meaning minimal heat transfer to adjacent materials.

Installing ThermaBoard beneath an underfloor heating system dramatically reduces both heat loss and the cost of running domestic heating systems. Offering excellent thermal properties, using ThermaBoard in conjunction with underfloor heating improves the efficiency of the heating

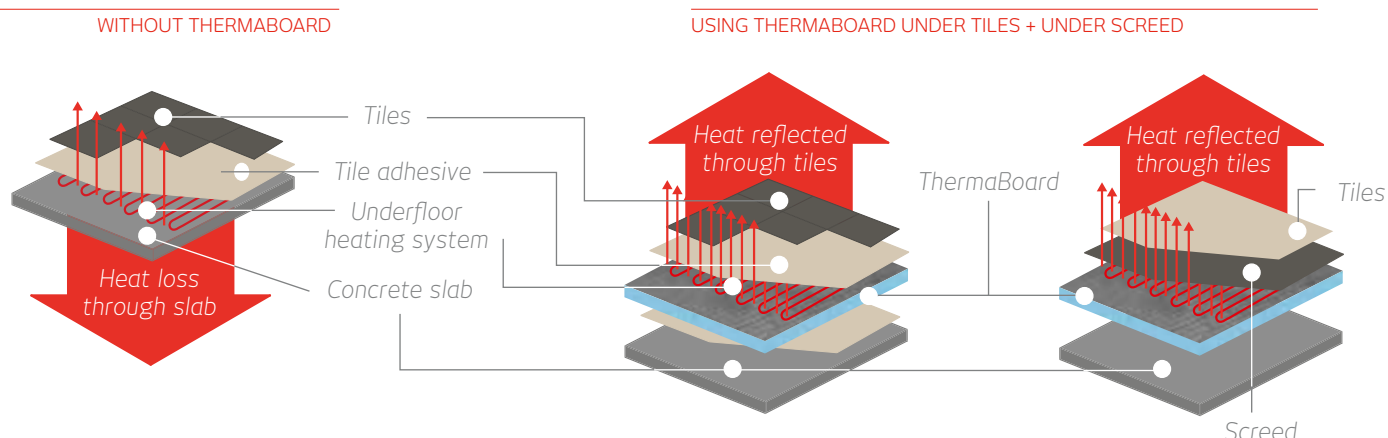


THERMABOARD CONSTRUCTION



system, enabling a warm floor to be achieved in as little as 30 minutes, as opposed to hours, if ThermaBoards are not used. The cost savings of using ThermaBoard can be significant.

ThermaBoard also offers high thermal insulation that can benefit every room in the house by significantly reducing your heating loss – for high thermal insulation use a minimum of 20mm boards butted closely together.



Without insulation, up to **40% of heat** generated by an underfloor heating system could be lost through the sub-floor.

## ThermaBoard specifications

CODE	PRODUCT	DIMENSIONS
RTTB-06-1200	ThermaBoard Tile Backer Board – 6mm	1200mm x 600mm
RTTB-10-1200	ThermaBoard Tile Backer Board – 10mm	1200mm x 600mm
RTTB-10-2400	ThermaBoard Tile Backer Board – 10mm	2400mm x 600mm
RTTB-12-2400	ThermaBoard Tile Backer Board – 12mm	2400mm x 600mm
RTTB-20-1200	ThermaBoard Tile Backer Board – 20mm	1200mm x 600mm
RTTB-30-1200*	ThermaBoard Tile Backer Board – 30mm	1200mm x 600mm
RTTB-50-1200*	ThermaBoard Tile Backer Board – 50mm	1200mm x 600mm
RTHBC-30-1250	ThermaBoard Tile Backer Board CURVED – 30mm	1250mm x 600mm
RSN-SML	ThermaBoard Shower Niche Small	350mm x 350mm
RSN-LG	ThermaBoard Shower Niche Large	350mm x 650mm
RST	ThermaBoard Shower Tray (25mm – 10mm fall)	1000mm x 1500mm

\* Special Order subject to M.O.Q.



VERSION 1



**radiant**  
HEATING

**Radiant Heating Pty Ltd**

Unit 1 / 18 Profit Pass  
Wangara, WA 6065

**Telephone:** 08 9302 4140

**Fax:** 08 9303 4717

**[radiantheating.com.au](http://radiantheating.com.au)**

Visit our website for more information, including details of your local retailer and our display centres. Please note that this brochure is correct at time of printing, but as we do add to our range from time to time, we would recommend that you check our website for all current models available.