

Overview

Electric underfloor heating is a versatile and efficient solution for both new builds and renovations. Its low-profile design is ideal for projects where minimal height increase is needed, and it can be easily installed beneath most floor coverings, including tile, LVT (Vinyl)* wood*, and carpet*.

There are two main types of systems:

Loose Cables: Perfect for smaller or irregular spaces, allowing for flexible installation.

Sticky Mesh Mats: Ideal for larger, more regular areas, offering quick and even coverage.

These systems maximize space by eliminating the need for radiators and are energy-efficient, easy to install, and maintenance-free, making them an excellent choice for any property.

*With these systems being covered with 10mm of Self Levelling Compound.

Electrics Regulations

As with any electrical work we always advise customers instruct a fully qualified electrician to test and inspect the house electrics ensuring it's safe to install a new circuit of any kind.

Assuming the customer is having a new kitchen or bathroom fitted, it's most likely there will be an electrician involved in the project to do this. Obviously, we don't recommend giving any advice to customers about electrical work, but it's important that you know what can be installed onto an individual thermostat.

All circuits must conform to the current IET wiring regulations and building regulations, all circuits must be protected by an RCD protected circuit.

Electric Thermostats are rated at 16amps / 3600 Watts

A maximum load of 3600w can be powered by a single thermostat, any required heating system generating an output larger than 3600w will require a suitably sized contactor.

Assuming a customer has selected a 24m² 150w heating mat, we calculate the output by multiplying the area by the output m². See below examples:

$$24\text{m}^2 \times 150\text{w} = 3600\text{w}$$

So, what if the customer has fitted a larger 30m² kit? This would be calculated as per the following example:

$$30\text{m}^2 \times 150\text{w} = 4500\text{w}$$

This will require a suitably rated contactor!

The largest kits that can be used with a single 16amp Thermostat are:

$$24\text{m}^2 \text{ @ } 150\text{w mats} = 3600\text{w}$$

$$360\text{m of loose cable @ } 10\text{w per meter} = 3600\text{w}$$

Please note, the maximum rating of a fused spur is 13amps.

$$19\text{m}^2 \text{ @ } 150\text{w mats} = 2850\text{w (12.4A)}$$

$$21\text{m}^2 \text{ @ } 150\text{w mats} = 3150\text{w (13.7A)}$$

$$290\text{m of loose cable @ } 10\text{w per meter} = 2900\text{w (12.6A)}$$

$$320\text{m of loose cable @ } 10\text{w per meter} = 3200\text{w (13.9A)}$$

Any load larger than 13 amps will require a designated circuit from the consumer unit. If in any doubt, please consult us or advise the customer to check with their installing electrician.

Calculating Loads

Mats

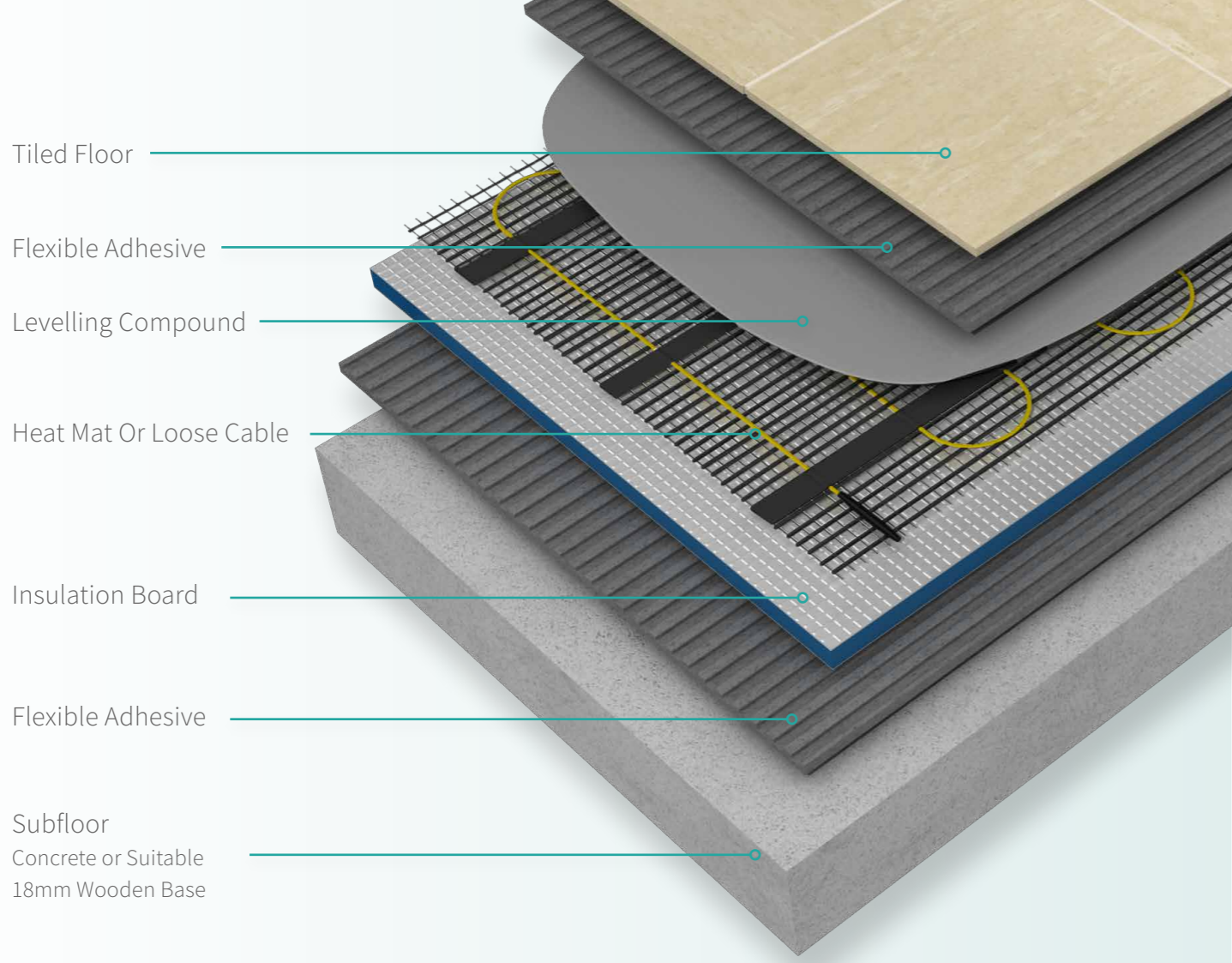
m² multiplied by output (150w) = Load
Load Divided by voltage(230v) = Amps

$$\text{E.g. } 10\text{m}^2 \times 150\text{w} = 1500\text{w (1500w / 230v} = 6.5\text{A)}$$

Cable

Linear meter of cable multiplied by 10w = Load
Load Divided by voltage(230v) = Amps

$$\text{E.g. } 40\text{m} \times 10\text{w} = 400\text{w (400w / 230v} = 1.7\text{A)}$$



Heating Mat

Sticky Heating Mats are a highly popular and versatile electric underfloor heating system, combining the efficiency of loose cable heating with the convenience of pre-set cable spacing. These mats feature high-quality heating cables embedded within a durable mesh, ensuring consistent and even heat distribution across the installation area.

Installation Process

The installation of Sticky Heating Mats is straightforward. The mats, typically 500mm wide, are simply unrolled across the floor surface. For areas with irregular shapes or obstacles, the heating cable can be detached from the mat and repositioned as needed to ensure complete coverage. This system is particularly well-suited for residential spaces such as kitchens, lounges, dining rooms, and other living areas. The mats are available in multiple sizes, including 1m², 2m², 3m², 7m², and 10m², with a standard output of 150W/m², making them compatible with various floor finishes.

Compatibility with Floor Coverings

Sticky Heating Mats can be tiled over using a flexible tile adhesive. To prevent damage during tile installation, it's recommended to apply a suitable levelling compound to fully encapsulate the heating cables. For floor coverings such as luxury vinyl tile (LVT), engineered wood, or low-tog carpets, a 10mm layer of levelling compound is necessary to ensure adequate protection to the floor covering and the heating cable.

Heating Efficiency

In well-insulated spaces, particularly where a minimum of 90% of the floor area is covered, 150W/m² mats can potentially serve as the primary heat source, eliminating the need for additional radiators. However, this is contingent on the thermal properties of the space, including insulation quality and floor construction. Insulation boards installed beneath the mats can further enhance energy efficiency.

Limitations

It's crucial to avoid promising the heating capacity of these systems in areas with limited available floor space or poor insulation. For instance, in older properties with single glazing, solid walls, and uninsulated floors, where fixtures occupy a significant portion of the floor area, the heating system may not be sufficient to serve as the sole heat source. In such cases, supplementary heating may be required.

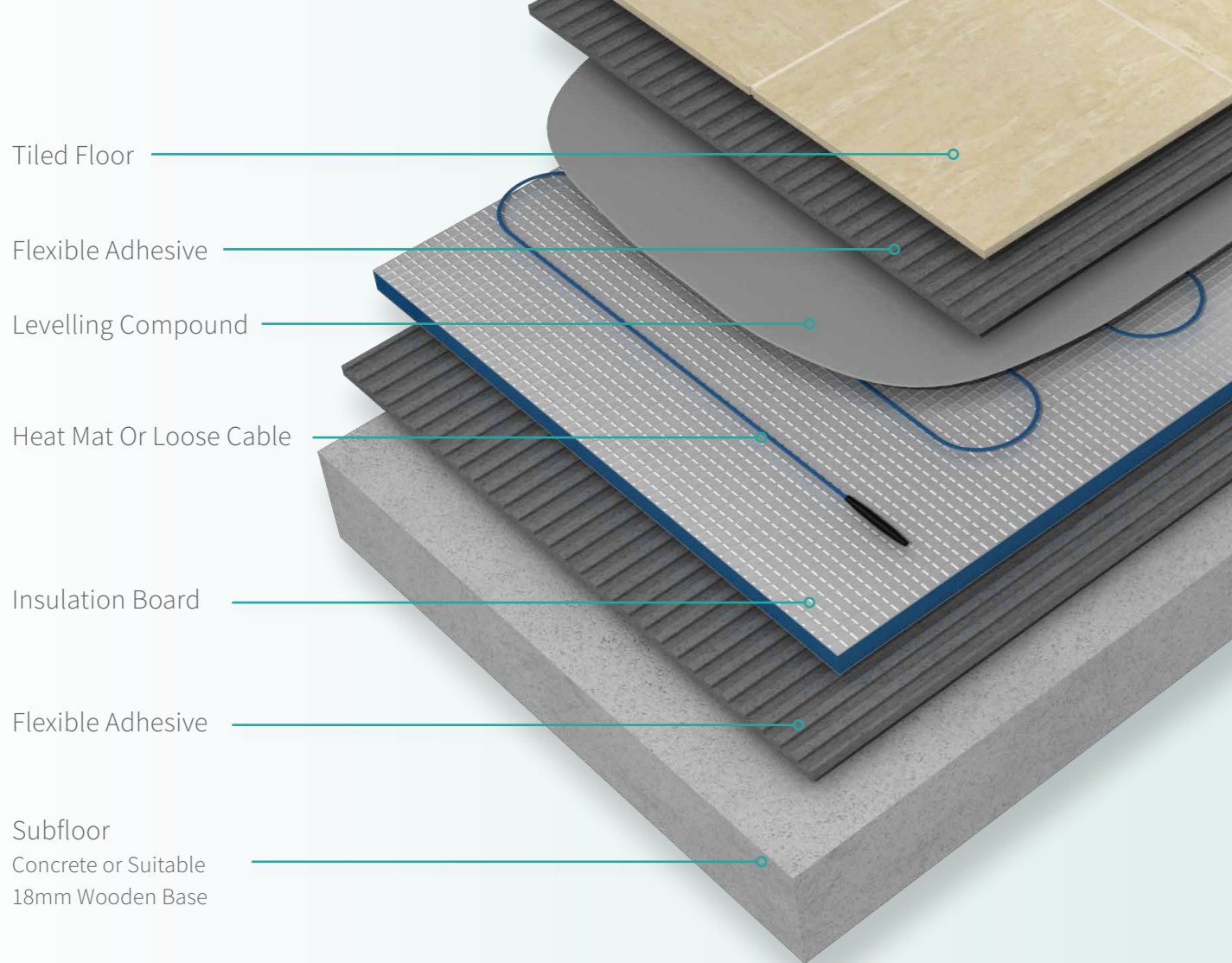
Technical Data

To join multiple underfloor heating mats covering up to 20m², ensure that each mat is wired in parallel to the thermostat. This configuration is critical for maintaining uniform heating distribution across the entire floor area. Start by carefully positioning each mat according to the room layout, ensuring that no mats overlap, which could cause uneven heating or potential damage.

The cold leads from each mat should be routed to a common location where they can be connected either directly to the thermostat or through an accessible junction box if using more than 2 mats to make a maximum area of 24m². Carefully strip the insulation from the cold leads, exposing the conductors. Connect the Live (BROWN) and Neutral (BLUE) wires from each mat to their corresponding terminals in the thermostat or junction box, ensuring that all connections are secure and comply with electrical safety standards. The Earth conductors should also be connected to a proper grounding point to ensure safety and compliance with electrical regulations. Properly securing and insulating these connections is essential to prevent any short circuits or electrical faults during operation.

Technical Data	
Operating Voltage	220 - 240v: 50Hz
IP Rating	IPX7
Width	500mm
Mat Thickness	4mm
Cable Thickness	4mm
Output Rating	150W/m ²
Inner Insulation	FEP
Outer Insulation	PVC
Min. Installation Temp	5°C
Connection	3m Long "Coldtail" Connection





Loose Cable

The Loose Wire System is designed for use within the adhesive layer under tiles or within a levelling compound under other floor finishes. The variable spacing of the cable available during design and installation allows the system power to be tailored to the properties requirements.

Cable Coverage Guide			
Cable Length	50mm / 200W	65mm / 150W	100mm / 100W
20m	1m ²	1.3m ²	2m ²
30m	1.5m ²	2m ²	3m ²
40m	2m ²	2.6m ²	4m ²

Installation Process

The installation of the Loose Wire System is straightforward. The cable is simply unrolled across the floor surface and held in place using suitable adhesive tape, making this the perfect solution for irregular shaped areas or obstacles, being positioned as needed to ensure complete coverage. This system is particularly well-suited for smaller areas such as bathrooms and ensuites. The cables are available in multiple lengths, including 20m, 30m and 40m with a standard output of 10w per linear meter, below is a coverage guide replicating the suited minimum and maximum spacings.

Compatibility with Floor Coverings

Loose Wire System can be tiled over using a flexible tile adhesive. To prevent damage during tile installation, it's recommended to apply a suitable levelling compound to fully encapsulate the heating cables. For floor coverings such as luxury vinyl tile (LVT), engineered wood, or low-tog carpets, a 10mm layer of levelling compound is necessary to ensure the adequate thickness and cable protection.

Heating Efficiency

In well-insulated spaces, particularly where a minimum of 90% of the floor area is covered, a 200w/m² or 150w/m² cable system can potentially serve as the primary heat source, eliminating the need for additional radiators. However, this is contingent on the thermal properties of the space, including insulation quality and floor construction. Insulation boards installed beneath the cables can further enhance energy efficiency. Whereas 100W/m² is only used for floor warming purposes.

Limitations

It's crucial to avoid promising the heating capacity of these systems in areas with limited available floor space or poor insulation. For instance, in older properties with single glazing, solid walls, and uninsulated floors, where fixtures occupy a significant portion of the floor area, the heating system may not be sufficient to serve as the sole heat source. In such cases, supplementary heating may be required.

Technical Data

To join multiple underfloor heating Cables covering up to 360m (18m²@200w, 24m²@150w, 36m²@100w), ensure that each cable is wired in parallel to the power supply via the thermostat. This configuration is critical for maintaining uniform heating distribution across the entire floor area. Start by carefully positioning each mat according to the room layout, ensuring that no cables overlap, which could cause uneven heating or potential damage.

The cold leads from each cable should be routed to a common location where they can be connected either directly to the thermostat or through an accessible junction box. Carefully strip the insulation from the cold leads, exposing the conductors. Connect the Live (BROWN) and Neutral (BLUE) wires from each cable to their corresponding terminals in the thermostat or junction box, ensuring that all connections are secure and comply with electrical safety standards. The Earth conductors should also be connected to a proper grounding point to ensure safety and compliance with electrical regulations. Properly securing and insulating these connections is essential to prevent any short circuits or electrical faults during operation.

Technical Data	
Operating Voltage	220 - 240v: 50Hz
IP Rating	IPX7
Cable Thickness	4mm 5mm
Output Rating	10W/m
Inner Insulation	FEP
Outer Insulation	PVC
Min. Installation Temp	5°C
Max. Installation Temp	80°C
Connection	3m Long "Coldtail" Connection



Tile Backer Insulation Boards

Both Sticky Mat and Loose Cable systems can be installed above various floor surfaces, such as screed and timber substrates. You will need to ensure floors are structurally sound and that there are no vertical deviations. Tile Backer Boards are the perfect option to insulate pre-existing floors and are recommended to be used prior to either of the electric underfloor heating systems being laid. This will help reduce the running cost, warming times and the cooling periods making the system more energy efficient.

Installation Process

The installation of the Tile Backer Insulation Boards may vary depending on your subfloor. The subfloor either being Concrete(screed) or Timber (Joists with Ply, Chipboard or floorboards). In all cases it is recommended to prime the subfloor, bond boards in brick bond pattern using a flexible tile adhesive and then prime boards ready for the electric sticky mat or loose cable to be laid. If the boards are being laid onto a timber floor, then a screw and washer will also be required to second fix the boards securely.

**1**

Ensure subfloor is sound, prepped and free of Dust and Debris.

**2**

Prime floor and allow primer to dry prior to the boards being laid.

**3**

Using a notch trowel adhere the boards in a brick bond method

Technical Data

Tile backer boards are a high density, extruded polystyrene insulation hard foam, coated on both sides with a glass-fibre mesh and a reinforced polymer-cement coating.

Technical Data

Thickness	6mm
Board Dimension	1200 x 600 mm
Material Type	Extruded Polystyrene, Fibreglass Mesh & Cementitious Coating
Thermal Conductivity	0.027 W/mk
Material Density	>30 kg/m ³
Compression Strength	30 t/m ²
Vertical Tile Weight Load	50 kg/m ²
Moisture Absorption	<0.1 vol %



Wi-Fi Thermostat

The Wi-Fi Thermostat (16 amp) is a cutting-edge solution designed for effortless control of electric underfloor heating systems. With seamless integration into your home network, this thermostat offers the convenience of remote access and advanced temperature management through a dedicated app, ensuring optimal comfort and energy efficiency from anywhere.

Specification

Loose Cable (10w per m)

36m²

2 x 180m Loose Cable drums (15.65amps)

150w Sticky Mat

24m²

2 x 12m² Sticky Mats (15.65amps)



Key Features

High Power Capacity: The Wi-Fi Thermostat can handle loads up to 3600W/16 amps, making it a versatile choice for various electric underfloor heating installations. This high capacity ensures reliable performance across different heating setups.

Wi-Fi Connectivity and App Control: With built-in Wi-Fi, this thermostat connects to your home network, allowing you to monitor and adjust your heating system from anywhere using the dedicated app. Whether you're at home, at work, or on the go, you have full control over your heating schedule and temperature settings at your fingertips.

Dual Temperature Control: Choose to manage either the ambient air temperature or the floor temperature, depending on your preference. The thermostat includes a 3-meter floor sensor probe, providing precise floor temperature readings to ensure consistent and comfortable heating.

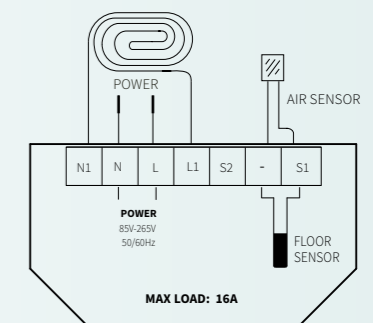
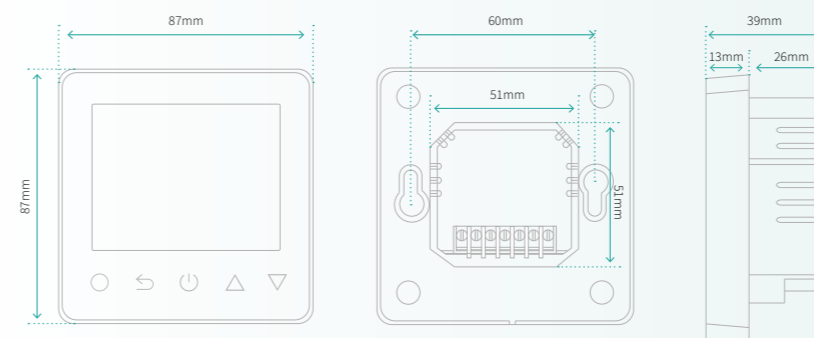
Customisable Programming: The app offers flexible programming options, allowing you to set 7-day or 5/2-day schedules directly from your smartphone or tablet. Customise heating patterns for each day of the week or distinguish between weekday and weekend settings to maximize energy efficiency.

Adaptive Start Learning Function: The adaptive start feature intelligently learns the optimal time to begin heating, ensuring your desired temperature is reached at the set time. This function, accessible via the app, enhances comfort while reducing energy consumption by optimizing the heating cycle.

Temperature Display Options: Easily switch between Fahrenheit (°F) and Celsius (°C) within the app, accommodating your regional temperature preferences.

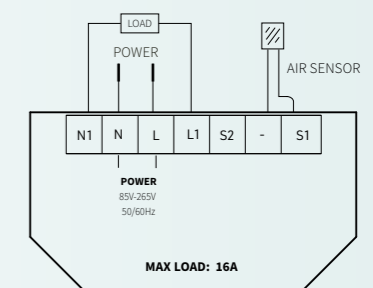
Temperature Override: Allowing override of the thermostat temperature when in any setpoint of the day. This feature will only override thermostat temperature until the next schedule is due to activate.

The Wi-Fi Thermostat is the ideal solution for those seeking advanced, remote-controlled management of their electric underfloor heating systems. For specific load capacities tailored to various electric heating kits, please refer to the detailed specifications below.



16A

Electric Underfloor Heating



16A

Timer Clock



Specification

Loose Cable (10w per m)

36m²

2 x 180m Loose Cable drums (15.65amps)

150w Sticky Mat

24m²

2 x 12m² Sticky Mats (15.65amps)



Digital Thermostat

The Digital Thermostat (16 amp) is a sophisticated and stylish thermostat engineered specifically for electric underfloor heating systems. Designed with both functionality and aesthetics in mind, this thermostat offers precise control over your heating environment, ensuring optimal comfort and energy efficiency.

Key Features

High Power Capacity: The Digital Thermostat can switch loads up to 3600W/16 amps, making it suitable for various electric underfloor heating systems. This high load capacity ensures compatibility with a wide range of heating installations.

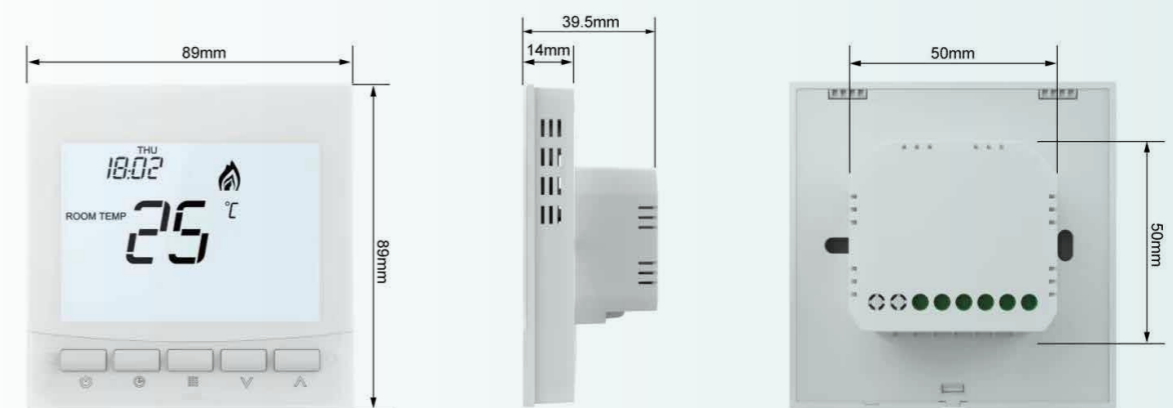
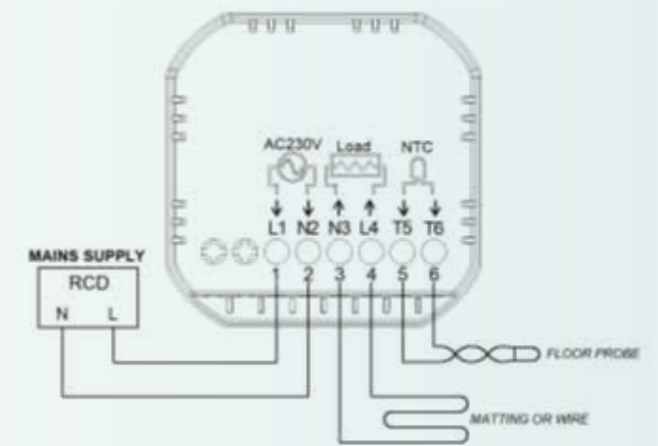
Dual Temperature Control: This thermostat offers flexibility in controlling either the ambient air temperature or the floor temperature, depending on the user's preference. It is equipped with a 3-meter floor sensor probe, which accurately monitors and regulates the floor temperature to maintain consistent heating.

Customisable Programming: The thermostat supports both 7-day and 5/2-day programmable settings, allowing users to customise heating schedules for each day of the week or differentiate between weekday and weekend settings. This feature ensures that heating is only active when needed, reducing energy consumption.

Temperature Display Options: Users can choose between Fahrenheit (°F) and Celsius (°C) for temperature display, offering flexibility in line with regional preferences.

Temperature Override: Allowing an override of the thermostat temperature when in any setpoint of the day. This feature will only override thermostat temperature until the next schedule is due to activate.

This thermostat is ideal for those seeking a reliable, high-capacity solution for their electric underfloor heating needs, combining advanced features with user-friendly design. For specific load capacities applicable to different electric kits, please refer to the detailed specifications below.



Touch Thermostat

The Touch-Screen Thermostat (16 amp) is a sleek and intuitive solution designed for controlling electric underfloor heating systems. Combining modern design with advanced technology, this thermostat offers precise and effortless temperature management, ensuring both comfort and energy efficiency.

Specification

Loose Cable (10w per m)

36m²

2 x 180m Loose Cable drums (15.65amps)

150w Sticky Mat

24m²

2 x 12m² Sticky Mats (15.65amps)



Key Features

High Power Capacity: The Touch-Screen Thermostat can handle loads up to 3600W/16 amps, making it versatile enough for a wide range of electric underfloor heating applications. This capacity ensures robust performance across various heating setups.

Intuitive Touch-Screen Interface: The large, responsive touch screen makes it easy to navigate through settings and adjust temperatures with just a tap. The clear display provides a user-friendly experience, allowing for quick and precise adjustments.

Dual Temperature Control: Choose to control either the ambient air temperature or the floor temperature, depending on your needs. The thermostat is equipped with a 3-meter floor sensor probe, which provides accurate floor temperature readings to maintain a consistent heating environment.

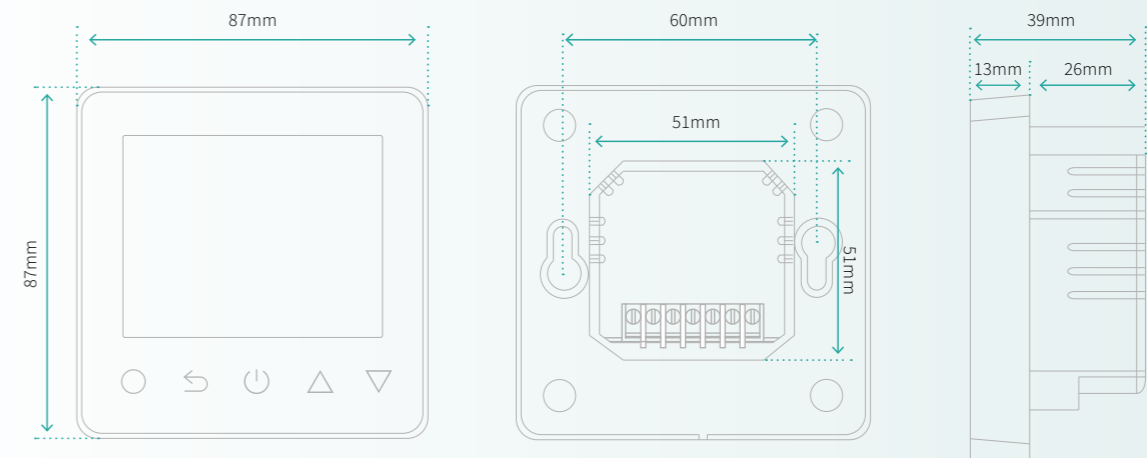
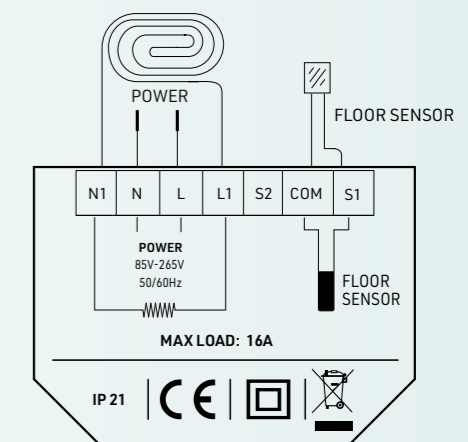
Customisable Programming: The thermostat supports both 7-day and 5/2-day programmable schedules, giving you the flexibility to set different temperatures for each day of the week or separate weekday and weekend settings. This programmable feature helps optimize energy use by ensuring the heating system operates only when necessary.

Adaptive Start Learning Function: The adaptive start feature intelligently learns the best time to begin heating to ensure your desired temperature is reached at the scheduled time. This function enhances comfort while reducing energy consumption by optimizing the heating cycle.

Temperature Display Options: Users can select their preferred temperature unit, either Fahrenheit (°F) or Celsius (°C), directly from the touch-screen interface, accommodating regional preferences.

Temperature Override: Allowing override of the thermostat temperature when in any setpoint of the day. This feature will only override thermostat temperature until the next schedule is due to activate.

This touch-screen thermostat is ideal for those who seek a high-performance, easy-to-use control system for their electric underfloor heating. For details on load capacities specific to various electric heating kits, please refer to the specifications below.



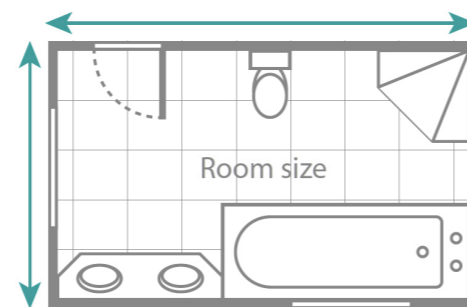
Measuring The System

When measuring for the underfloor heating system, it's crucial to size the heat mat or cable precisely, as it cannot be shortened.

1

Measuring Room Dimensions

Enter the length and width of your room and we'll work out the calculations for you.



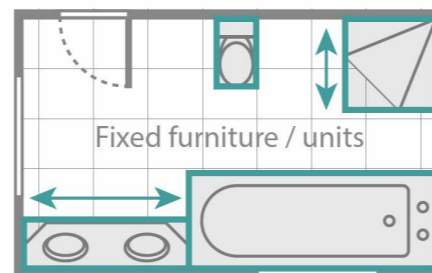
For example

Length (m2)		Width (m2)		Total room size (m2)
2.75	×	2.25	=	6.190

2

Measuring Unheated Areas

Measure any permanent / fixed furniture items as these will block the heated areas.



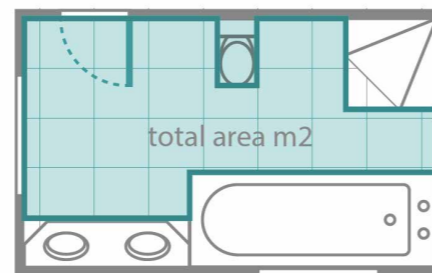
Fixture Length (m2)	Fixture Width (m2)	Sub Total (m2)
0.80	×	0.80
1.70	×	0.70
1.05	×	0.40
0.39	×	0.42

NB: Once you have deducted the furniture sizes from the total floor area you are left with the total heatable floor space. Deduct 10% from this figure to allow for a 100mm gap around the perimeter (and for over measuring!!) this will give you the size of the kit, rounding down to the closest suitable kit size.

3

Calculating Total Heat Area

Reduce the available floor area by 10% to ensure the heating system fits. Heating cables cannot be cut or shortened in any way if too long.



Space (m2)		Footprint (m2)		Total fitted area (10% deducted)
6.190	-	2.414	=	3.4 m ²

This formula shows the basics you need to calculate a system for around 70 -80% of standard installations.

However, if the customer is tiling under the bath or kitchen units, ensure you have sufficient insulation boards to cover this. This is to ensure you maintain the same floor height. The same calculation applies to supplying insulation boards as it does tiles.

Total tiled area + 10% wastage = insulation board area

What Do I Need?

When sizing for any electric underfloor heating (UFH) project, it is recommended to reduce the available floor area by 10%.

Using the example below, here's how to calculate the materials you'll need to complete your project:

Step 1: Calculate the Available Floor Area

Total Room Size: 6.190m² (100% of the room)

Deduction for Fixtures & Fittings: 2.414m²

Available Area for UFH Installation: 6.190m² - 2.414m² = 3.776m²

-10% Reduction: 3.776m² - 10% = 3.4m²

Step 2: Calculate the Number of Boards Required

Board Size: 1.200m x 0.600m = 0.72m²

Calculation: Available Area (before 10% reduction) / Board Size 3.776m² ÷ 0.72m² = 5.23 boards

Order Quantity for Tile Backer Boards: 6 boards

Step 3: Sizing for Sticky Mat or Loose Cable

Calculation for Sticky Mat

3.776m² - 10% = 3.4m²

Order Quantity: 3m² 150W Sticky Mat

Calculation for Loose Cable

3.776m² - 10% = 3.4m²

Order Quantity Based on Wattage:

100W per m² = 30m cable

150W per m² = 20m + 30m = 50m cable

200W per m² = 30m + 40m = 70m cable

Helpful Calculation

To determine exact cable spacing:

Formula:

Area (after 10% reduction) ÷ Cable Length

E.g. 3.4m² ÷ 50m = 0.068m spacing

Or, 3.4m² ÷ 70m = 0.049m spacing

Testing and Commissioning Guidelines for Electrical Installations

When sizing for any electric underfloor heating (UFH) project, it is recommended to reduce the available floor area by 10%.

IMPORTANT: Electrical installations pose inherent risks, including fire hazards and electrical shock. It is imperative that only a qualified professional conducts testing, makes final connections, chases walls, and installs back boxes for fused spurs and thermostats. This ensures compliance with current regulations and safety standards.

Regulatory Compliance: According to the current IEE Wiring Regulations, Part P, only a qualified electrician is authorized to test and make final connections in an electrical installation. This is a legal requirement to ensure the safety and reliability of the system.

Underfloor Heating System Requirements: Electric underfloor heating systems must be integrated into an RCD (Residual Current Device) protected circuit to mitigate electrical faults. For systems with a power requirement not exceeding 13 amps, a fused spur with all-pole separation can be utilized. For systems exceeding 13 amps, an appropriately rated protective device must be employed. In some cases, a contactor controlled by the thermostat may be necessary to manage the load effectively.

Testing Procedures

1. Resistance Testing

Purpose: To measure the electrical resistance of the Heating Element.

Procedure: Using a multimeter, set it to the appropriate resistance (Ohms) setting. Measure the resistance between the Live (BROWN) and Neutral (BLUE) wires.

Important Consideration: The measured resistance may vary based on the cable length. A deviation of ±10% from the value specified in the installation guide is acceptable.

2. Insulation Resistance Testing

Purpose: To verify the insulation integrity of the Heating Cable

Procedure: Using an insulation resistance tester, conduct a 500 Volt DC test between the Live (BROWN) and Earth, as well as between Neutral (BLUE) and Earth.

Expected Results: A successful test should indicate a clear reading greater than the testers maximum readable value, signifying intact insulation. A lower reading or open circuit suggests potential damage to the cable, requiring immediate attention.

Testing Phases for Heating System

The heating system undergoes rigorous testing at multiple stages to ensure functionality and safety:

1. Pre-Installation: Conduct and record the initial Ohms resistance readings after unpacking.

2. Pre-Installation Insulation Test: The installing electrician must perform a 500 Volt DC insulation resistance test and document the results.

3. Post-Installation on Subfloor: Record the Ohms resistance readings once the system is installed on the subfloor.

4. Pre-Final Floor Covering: If a smooth levelling compound is applied, perform another resistance test before laying the final floor covering and document the readings.

5. Final Insulation Resistance Test: Conduct a final 500 Volt DC insulation resistance test and record the results.

Compliance and Conflict Resolution: Always reference the installation guide to verify that the measured values align with the specified figures. In the event of any discrepancies, it is advisable to consult the underfloor heating (UFH) provider to resolve the issue promptly and ensure the system operates within safe parameters.

Running Costs of Electric Underfloor Heating Systems

The running costs of an electric underfloor heating system are influenced by several factors, including the size of the installation, the insulation quality of the property, and the specific design of the system. Electric underfloor heating typically incurs higher operational costs compared to hydronic (water-based) systems.

Electric underfloor heating systems generally have a higher cost per kilowatt-hour (kWh) compared to water systems. This is primarily due to the higher price of electricity compared to gas. On average, electricity costs approximately 23p per kWh*, whereas gas costs around 6p per kWh*. This discrepancy results in electric systems often being three to four times more expensive to operate than their water-based counterparts.

To optimize running costs, it's crucial to consider the thermal efficiency of the electric underfloor heating system. Factors such as the quality of the heating cables or mats, the thermostat controls, and the insulation within the property all play significant roles in determining overall energy consumption and efficiency. Advanced thermostatic controls and high-quality insulation can help mitigate some of the operational costs by improving system efficiency and reducing heat loss.

Below shows the total cost for running your underfloor heating over a 5 hour period.

Running Costs				
HOURS / AREA	1m ²	6m ²	12m ²	24m ²
1	0.03p	0.21p	0.42p	0.82p
2	0.06p	0.37p	0.73p	£1.45
3	0.08p	0.47p	0.93p	£1.86
4	0.09p	0.52p	£1.03	£2.07
5	0.10p	0.57p	£1.14	£2.27

*Unit Price accurate at time of print

Electric Underfloor Dos and Don'ts

- ✓ **Do** reduce room size by 10% prior to providing mat or cable size.
- ✓ **Do** advise that a qualified trader is needed to connect the system to power supply.
- ✓ **Do** advise that if covered with 10mm of leveller then most floor finishes are suitable as Tile, LVT, Wood and low tog carpets.
- ✓ **Do** remove fitted fixtures and fittings from the floor area as the system.
- ✗ **Don't** over size mats or loose cables as they cannot be shortened / reduced.
- ✗ **Don't promise** customers that the underfloor heating can be used as a sole source of heat.
- ✗ **Don't** allow customers to used highly insulative material above the underfloor heating. **2.5 TOG Max**
- ✗ **Don't Advise** customers that they can lay any floor directly to the systems unless **TILES**. The system must be covered with 10mm leveller prior for other types of floor coverings.
- ✗ **Don't** provide heating under fixtures and fittings, this will invalidate any warranties.

FAQ

I have too much cable left, can I cut some off the heating mat or cable system?

No. You CAN'T cut the heating wires or cables at all as they are specially designed series resistive wires. Shortening one of the heating cables means the rest of the load runs through a smaller circuit. It will overheat and eventually fail. Each heating mat or cable is supplied with its own unique resistance rating, this specific resistance can also be found in the installation guide manual.

Can I control 2 different zones through 1 thermostat with different temperatures?

No. You will need one thermostat per room or per heating zone.

Do you need to be a qualified electrician to install underfloor heating?

Most of the work involved with installing underfloor heating does not need to be carried out by a qualified electrician. Fixing insulation boards and adhesive can be carried out by a competent person providing they follow the installation guide. We recommend that you use an electrician to carry out the actual electrical installation, the system must be fully tested throughout the duration of the installation.

Can these mats be wired to a plug?

No. The heating cable or mat must be wired via a suitably rated thermostat that is hard wired via a suitable isolation switch. The thermostat prevents the heating system from overheating and reduces running costs.

Can electric underfloor heating cables and mats be installed straight on the subfloor?

They can... However, we strongly advise that a tilebacker insulation board is installed first. Tilebacker Insulation boards greatly reduce warm up times and restrict heat being transferred down into the subfloor.

I have damaged the heating cable, can it be repaired?

Yes, heating mats and cables are easily repaired, repair kits can be found online or speak to your UFH provider for guidance.

Why have I been supplied with 2 cables or mats? Can they be connected together?

Any system over 12m2 will normally be 2 separate heating cables or mats. So, when installing an area over 10m2's, the heating mat kit will consist of 2 x separate heating mats. Each heating mat/cable comes with a 3 metre power lead (cold tail) . These heating mats/cables will need to be connected in parallel near the thermostat. Both power leads should be installed and connected to the thermostat or a suitable junction box before extending to the thermostat.