Electric Under Floor Heating for Tile and Stone Floors.

www.handyheat.co.uk
Why electric under-floor heating?

Electric under-floor heating is fast becoming a popular form of heating, especially where cold surfaces such as tiles, stone & marble are used. Under-floor heating was invented by the Romans some 2000 years ago, but today it is used in many countries around the globe, including Europe, the USA, Australia and New Zealand to name just a few.

It is currently used extensively in bathrooms, kitchens, conservatories and sun rooms – in fact it can be used in any room where a tile, stone or marble floor is being fitted.

Suitable sub-floors

Any sub-floor suitable for tiling should be suitable for the under-tile heating system. In general these will be concrete or plywood, however some water-resistant chipboards may also be OK if adequately fixed down (please check with your tiler). Standard chipboard and MDF are not considered suitable surfaces on which to tile.

The heating capabilities and warm-up times will vary depending on the sub-floor; timber sub-floors and insulated concrete will perform better than un-insulated floors. In all cases the use of an insulated tile-backer board will greatly reduce warm-up times and subsequent running costs.

How does it work

The heating cable is simply installed within the flexible tile adhesive layer or a thin latex levelling screed and connected to an electrical supply via the digital thermostat, which regulates the floor temperature. The thermostat has its own built-in 7 day timer so the system can be programmed to suit your own individual requirements and lifestyle. The installation itself is a straightforward DIY job, but we always recommend that the electrical connections are carried out by a qualified electrician in accordance with current wiring regulations.

Heating cable

All our systems use the latest design heating cable with an earth screen and a double insulation layer. The cable also contains a built-in return, meaning that you only have to connect it to the mains from one end.

With these design features we are able to offer a LIFETIME GUARANTEE.

The main advantages of our systems are:

- Invisible – no unsightly radiators or wall-mounted heaters
- Maintenance free - no servicing or maintenance needed
- Economical – low running costs
- Controllable – by means of the digital thermostat supplied
- 3 mm heating cable – having little effect on the floor height
- Twin-core heating cable – just one ‘cold’ end to connect
- Suitable for timber or concrete sub-floors
- Suitable for comfort warming and in many cases* as room heating
- Available as cable on a drum or mat
- Wide variety of kits and sizes to suit all applications
- Ideal for kitchens, bathrooms, conservatories and any room with tiled, marble or stone floors
- **Lifetime Guarantee** on heating cable

*The suitability as primary heating will depend on the desired temperature and insulation levels of the building – please check with your retailer or our technical support if in doubt.
The running costs of the system will be dependent on several factors including the type of sub-floor, type of room/building where the installation is taking place, and if it is being used as a primary heating source or simply to warm a cold stone/tile floor.

**Typical warm-up times you can expect from the system:**

<table>
<thead>
<tr>
<th>Sub-floor time</th>
<th>Average warm-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tile-backer board</td>
<td>15 to 30 minutes</td>
</tr>
<tr>
<td>Timber floors</td>
<td>30 minutes to 1 hour</td>
</tr>
<tr>
<td>Insulated Concrete</td>
<td>2 to 3 hours</td>
</tr>
<tr>
<td>Un-insulated concrete</td>
<td>2 to 5 hours</td>
</tr>
</tbody>
</table>

Electric underfloor heating can be a very economical form of heating, the typical power consumption in an average bathroom where the cable is installed on a timber sub-floor or on an insulated tile-backer board would be about the same as a couple of lightbulbs and would cost just a few pence per day to run. Further details on running costs can be found on the website address printed on the reverse of this leaflet.

**How to select the correct system**

In order to cater for all requirements and room sizes, we supply a wide range of kit sizes. Selecting the system is in many cases a matter of personal choice, but in general where the system is being installed in a bathroom or small kitchen with fixed objects to work around (such as showers, WC’s, or kitchen units), most people find the cable kit an advantage. The cable kit offers the installer complete freedom to space the heating cable evenly over the floor—no matter how awkward the room shape—and thus avoid the problem of any cold spots.
Cable mats

Cable mats are the most popular choice for larger areas. The mats are available in 2 outputs, 150w/m² for internal rooms and 200w/m² for conservatories, to compensate for the higher heat losses. Under-floor heating is the perfect solution for heating a conservatory.

Every cable mat comes complete with:

- 3mm twin-conductor heating cable sewn on to a self-adhesive mesh mat
- Floor primer and roller
- 7 day programmable digital thermostat with built-in timer
- Lifetime Guarantee Certificate
- Full Detailed Instructions

Installing cable mats:

- Make the electrical provision as per instructions
- Plan the start-point and layout
- Prime the sub-floor with the primer provided
- Roll out the mat, cutting the mesh and turning when the opposite wall is reached

- Fit the floor probe
- Test the cable
- Tile over using flexible adhesives and grout

If you require further assistance please call our technical sales team free on 0800 881 8097, or alternatively online support with FAQ, at www.handyheat.co.uk.
A revolutionary insulating acrylic floor primer that has been specifically designed for use with under-tile heating. Used as a substitute for our standard primer which is supplied with our under-tile heating kits, Therma-Coat can reduce energy loss to the sub-floor by up to 20%. Therma-Coat can be used in conjunction with tile backer boards or even directly onto the sub-floor, in situations where zero floor height is available for a conventional insulation material.

For further information please see the Therma-Coat information leaflet or online at www.handyheat.co.uk
Insulated tile-backer boards

The use of an insulated tile-backer board will in almost all cases reduce the warm-up time and subsequent running costs of the system. They make a significant difference when the system is being used as a primary heat source on an un-insulated floor or where quick warm-up times are desirable such as in a conservatory.

There are a variety of boards on the market, all of which are of fairly similar design and efficiency – further technical details are available on our website at: www.handyheat.co.uk

Thermostat

A digital thermostat with built-in timer is included in every kit.

- Elegant design
- Simple-to-use and programme
- 24 hour/7 day timer
- Comfort and economy temperature settings
- Vacation setting
- Manual over-ride
- Memory back-up
- Supplied with floor sensor

For further information and advice please see our website: www.handyheat.co.uk or email us at sales@handyheat.co.uk