



# ECOFLOOR

underfloor heating cable mat

Documentation of Ownership, Installation and Part P Electrical Connection  
The Information below must be fully completed, otherwise it may invalidate your warranty.

Owner's Details			
Name			
Address			
	Postcode		
Contact Tel.	Email Address		

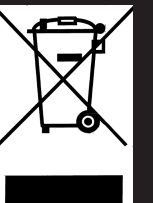
Installer's Details			
Name		Signature	
Address			
	Postcode		
Contact Tel.	Email Address		

Electrician's Details			
Name		Signature	
Address			
	Postcode		
Contact Tel.	Email Address		
Professional body enrolment number			

This instruction manual must be left at the distribution board along with a copy of the thermostat operating instructions and the original sales receipt. The supplied stickers should be placed near the distribution board and in the room installed with the underfloor heating.



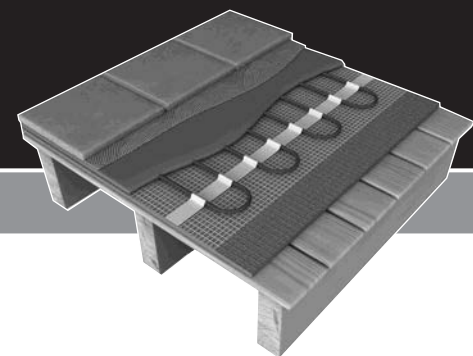
The complete electric underfloor heating solution  
for all tile and stone floors



### Important

This manual must be fully read and understood before installing your underfloor heating system. Incorrect installation or failure to complete the warranty slip and ECOFLOOR installation plan will invalidate the Flexel warranty.

**THIS BOOKLET TOGETHER WITH THE THERMOSTAT OPERATING INSTRUCTION, ORIGINAL SALES RECEIPT AND SUPPLIED STICKER MUST BE PLACED BY THE DISTRIBUTION BOARD.**

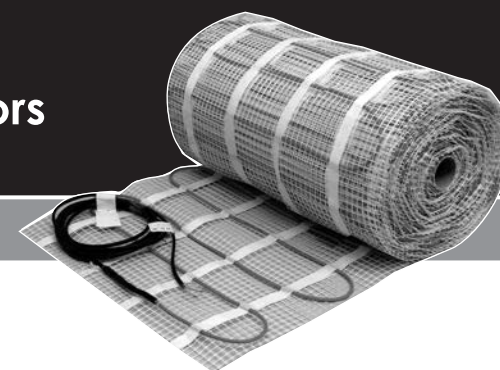


## ECOFLOOR - The complete electric underfloor

Installation is straight forward. However, if you require assistance

## heating solution for all tile and stone floors

call our dedicated technical team now on 01592 760928



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**Congratulations!** You have purchased a quality underfloor heating product from **Flexel International Limited** a leading UK manufacturer of specialist electric underfloor heating systems.

For additional information on our complete product range please visit **www.flexel.co.uk**.

### EASY TO INSTALL

By following these simple instructions, you will be able to install the **ECOFLOOR** underfloor heating mat without any difficulties. Only the final connection to the mains supply **MUST** be carried out by a suitably qualified electrician.

### INSTALL ALMOST ANYWHERE

**ECOFLOOR** can be installed on top of either suitably prepared suspended timber floors or solid concrete floors enabling installation in all room types. **ECOFLOOR** can also be installed under many floor coverings including: Tile, natural stone, slate, porcelain, marble, limestone & terracotta.

### MAINTENANCE FREE, SAFE, OVERALL WARMTH

Totally safe, under tile and stone floors, **ECOFLOOR'S** radiated heat provides overall warmth and comfort without the usual dust carrying convective air currents of conventional radiator systems. The large heated area provides an even temperature distribution, once installed is completely maintenance free.

### HOW EFFECTIVE IS UNDER TILE HEATING?

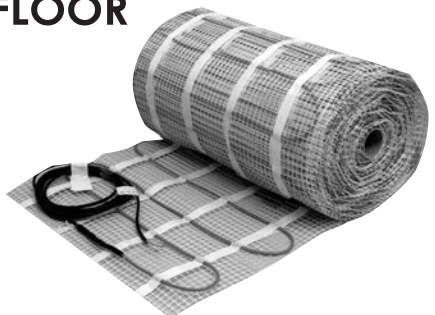



**ECOFLOOR** is a highly effective direct acting radiant heating system. It can provide primary heating or just be used to warm a floor and provide background heat. If you are considering using your **ECOFLOOR** heating mat as a primary or "sole" heat source, heat loss calculations for the room should be performed by your architect or heating engineer.

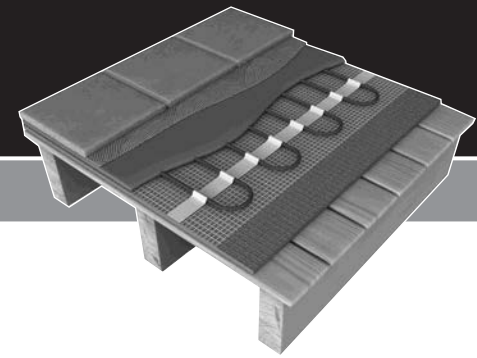
Installation is straight forward! However if you require assistance call our dedicated technical team now on 01592 760928

Please read the following instructions carefully to ensure ease of installation. Remember that the final electrical connections must be made by a qualified electrician and also that the warranty must be filled in and signed by the electrician to ensure that you are covered by our guarantee.

Flexel International Ltd, the manufacturer of ECOFLOOR Underfloor Heating Mats, accepts no liability, expressed or implied, for any loss or consequential damage suffered as a result of installations which do not follow this instruction booklet.

**ECOFLOOR Underfloor Heating Mat** is part of the **Flexel Underfloor Heating Systems** product range by **Flexel International Ltd**, Queensway Ind Est, Glenrothes, Fife, KY7 5QF, Scotland. T 01592 760928 F 01592 760929 W [www.flexel.co.uk](http://www.flexel.co.uk) E [enquiries@flexel.co.uk](mailto:enquiries@flexel.co.uk)

THIS BOX CONTAINS	ADDITIONAL ACCESSORIES (available separately)
1x ECOFLOOR Mat 	<b>ECOMAX</b> Thermal Insulation 
	<b>INSULATION FIXING SCREWS &amp; WASHERS</b> 
	<b>THERMOSTAT</b> (analogue or digital) 

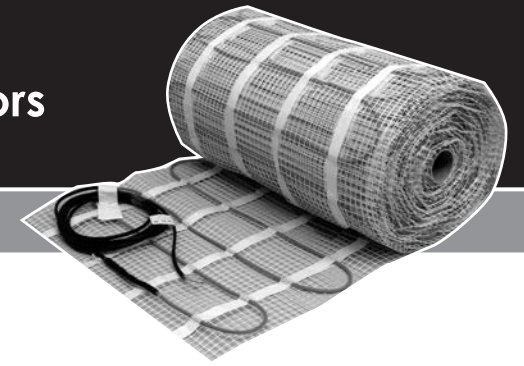


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### PRE-INSTALLATION CHECKLIST

- The orange heating cable must **NOT** be cut. Only the cold tail connection lead (black cable) may be shortened, as required.
- The installation must be protected by a 30mA RCD for safe operation.
- Check that the label on the **ECOFLOOR** outer packaging and the label attached to the cold lead of the cable mat are an identical match. Also that the mat supplied matches your requirement for area coverage and heat output by cross referencing on the product table (**page 3**) before commencing installation.
- In case of any discrepancies, you should report these immediately to the manufacturer or supplier and discontinue the installation immediately.
- When installing **ECOFLOOR** always wear rubber soled boots and avoid any unnecessary traffic over the cable mat. Inform other trades working in the vicinity of the installation process and request that they do not walk on the mat.
- Before laying the cable mat, check the cable resistance with an Ohm meter. It should match the rating on the mat label and on the product table (**page 3**) with a tolerance of -5 to +10%. You should check the cable mat resistance regularly at all stages of the installation.
- When installing multiple **ECOFLOOR** cable mats in a single room, the mats **MUST** be connected in parallel.
- Consideration should be given to sub-floor thermal insulation before laying your **ECOFLOOR** mat. A high quality thermal barrier such as **ECOMAX** insulated tile backer board will significantly slow the process of heat losses into the sub-floor, improve performance and reduce the initial warm-up time.
- **ECOMAX** is installed onto the concrete subfloor using tile adhesive. **ECOFLOOR** cable mat is placed directly onto its surface before being covered with flexible tile adhesive or self leveling compound.
- All the orange heating cable must be installed in the floor and covered with adhesive and/or self-leveling compound.
- When using flexible tile adhesive ensure that the cable is totally encapsulated with no air pockets.
- The perimeter of the self-leveling compound area must be separated from the vertical structures by an expansion joint (polystyrene, etc. up to 10mm wide). In cases where cables are laid in an area larger than 20m<sup>2</sup> or with a diagonal greater than 7m, it is necessary to install an expansion joint. The heating cable should not cross expansion joints. The non-heating connecting cables located at the expansion joints must be laid loosely in a protective tube.
- Consult the self-leveling compound manufacturers instructions as to a suitable drying out period before turning on the heating system.
- A suitable flexible tile adhesive is required when tiling over underfloor heating. Check with the adhesive manufacturer for suitability.
- The heating mat should not be placed in floor areas that will be permanently covered with floor fitted furniture or fittings (e.g. Kitchen units or baths etc).
- A minimum clearance of 50mm should be left between the heating mat and perimeter walls.
- Final electrical connection to the mains supply **MUST** be carried out by a qualified Electrician.
- Ensure that you have a thermostat with a floor sensor before commencing installation. The floor limit sensor complete with protective conduit must be installed in the floor before laying the **ECOFLOOR** mat.
- Consideration should be given to the load rating of the controlling thermostat. Where the load rating of the thermostat (Watts) is exceeded, a suitably rated contactor should be installed.

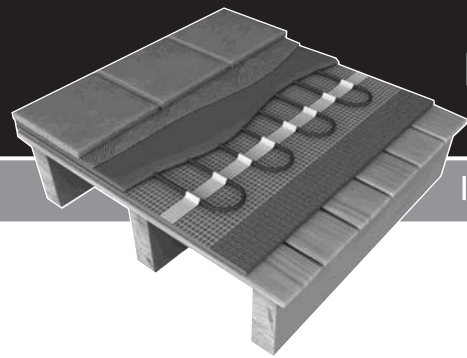
### PRODUCT TABLES

#### 150W/m<sup>2</sup> CABLE MAT - KITCHENS, BATHROOMS & LIVING AREAS

Area to be heated (m <sup>2</sup> )	Mat Reference	Output (W)	Width (m)	Length (m)	Resistance (Ω)
0.50m <sup>2</sup>	LDTS150-0.5	75	0.5	1.00	705.3
1.00m <sup>2</sup>	LDTS150-1.0	150	0.5	2.00	352.7
1.50m <sup>2</sup>	LDTS150-1.5	225	0.5	3.00	235.1
2.00m <sup>2</sup>	LDTS150-2.0	300	0.5	4.00	176.3
2.50m <sup>2</sup>	LDTS150-2.5	375	0.5	5.00	141.1
3.00m <sup>2</sup>	LDTS150-3.0	450	0.5	6.00	117.6
3.50m <sup>2</sup>	LDTS150-3.5	525	0.5	7.00	100.8
4.00m <sup>2</sup>	LDTS150-4.0	600	0.5	8.00	88.2
4.50m <sup>2</sup>	LDTS150-4.5	675	0.5	9.00	78.4
5.00m <sup>2</sup>	LDTS150-5.0	750	0.5	10.00	70.5
6.00m <sup>2</sup>	LDTS150-6.0	900	0.5	12.00	58.8
7.00m <sup>2</sup>	LDTS150-7.0	1050	0.5	14.00	50.4
8.00m <sup>2</sup>	LDTS150-8.0	1200	0.5	16.00	44.1
9.00m <sup>2</sup>	LDTS150-9.0	1350	0.5	18.00	39.2
10.00m <sup>2</sup>	LDTS150-10.0	1500	0.5	20.00	35.3
11.00m <sup>2</sup>	LDTS150-11.0	1650	0.5	22.00	32.1
12.00m <sup>2</sup>	LDTS150-12.0	1800	0.5	24.00	29.4

#### 200W/m<sup>2</sup> CABLE MAT - CONSERVATORIES & HIGH HEAT LOSS APPLICATIONS

Area to be heated (m <sup>2</sup> )	Mat Reference	Output (W)	Width (m)	Length (m)	Resistance (Ω)
1.00m <sup>2</sup>	LDTS200-1.0	150	0.5	2.00	264.5
2.00m <sup>2</sup>	LDTS200-2.0	300	0.5	4.00	132.3
3.00m <sup>2</sup>	LDTS200-3.0	375	0.5	6.00	88.2
4.00m <sup>2</sup>	LDTS200-4.0	450	0.5	8.00	66.1
5.00m <sup>2</sup>	LDTS200-5.0	750	0.5	10.00	52.9
6.00m <sup>2</sup>	LDTS200-6.0	900	0.5	12.00	44.1
7.00m <sup>2</sup>	LDTS200-7.0	1050	0.5	14.00	37.8
8.00m <sup>2</sup>	LDTS200-8.0	1200	0.5	16.00	33.1
9.00m <sup>2</sup>	LDTS200-9.0	1350	0.5	18.00	29.4
10.00m <sup>2</sup>	LDTS200-10.0	1500	0.5	20.00	26.5

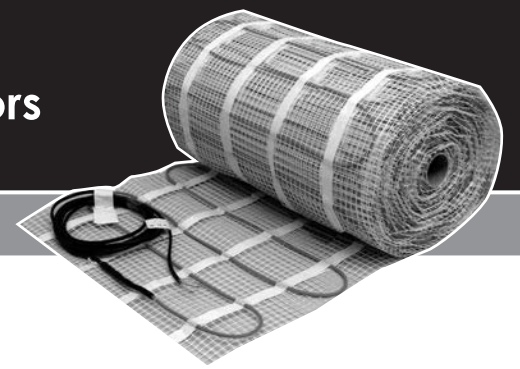


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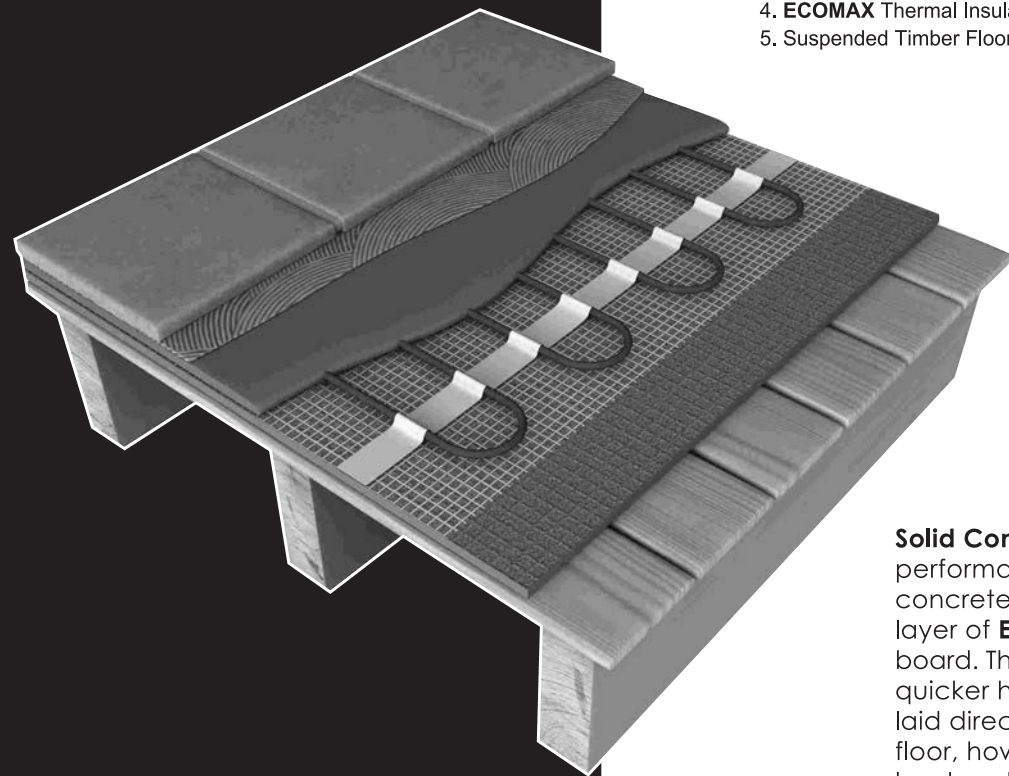
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## FLOOR CONSTRUCTIONS

Solid Concrete Floors  
Suspended Wooden Floors

1. Tile/Stone Floor
2. Tile Adhesive and/or Self leveling compound
3. ECOFLOOR Cable Mat
4. ECOMAX Thermal Insulation
5. Suspended Timber Floor/Concrete Sub Floor



**Solid Concrete Floors** - For optimum performance it is recommended that concrete subfloors should be covered by a layer of **ECOMAX** Insulated tile backer board. This will minimise heat losses & ensure quicker heat-up times. **ECOFLOOR** can be laid directly onto an un-insulated concrete floor, however this will increase both heat-up times & running costs.

**Suspended Wooden Floors** - When fitting **ECOFLOOR** onto a timber sub-floor it is essential that you take the standard precautions to stabilise the floor and prevent floor movement. You must always over-board the timber floorboards or chipboard with a surface suitable for tiling. Flexel recommend **ECOMAX** Insulated Tile Backer Board or primed 18mm WBP Plywood.

## GETTING STARTED

It is good practice to plan your installation using a sketch marking your laying pattern and planning the positions for floor sensor, the connection box and thermostat.

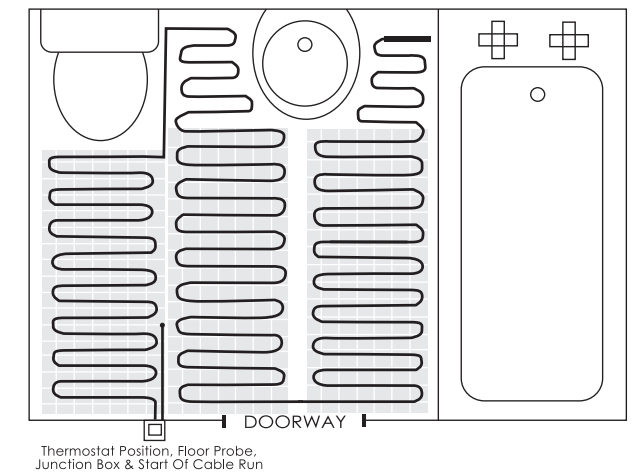
Accurately measure the free floor area to be heated, in square metres, deducting any items of fixed furniture such as baths, WCs, showers, kitchen units etc. To allow for perimeter clearance, reduce the free floor area by 15% for areas up to 5m<sup>2</sup> and 10% for areas greater than 5m<sup>2</sup>. Use this calculated area (m<sup>2</sup>) to select the nearest cable mat size **DOWN** using the product selection chart. **NEVER** select the nearest mat size up.

If the calculated "Effective" floor area is larger than the mat sizes offered, you can use a combination of mats to achieve the coverage. Additional mats should be wired in parallel using a suitable junction box.

It is important that the correct size of **ECOFLOOR** matting is used as the cable cannot be shortened.

Free Floor Area	Effective Floor Area	Product Code
3m <sup>2</sup>	2.55m <sup>2</sup>	LDTS150-2.5 (2.5m <sup>2</sup> )
8m <sup>2</sup>	7.2m <sup>2</sup>	LDTS150-7.0 (7.0m <sup>2</sup> )

Example Mat Layout



**Note:**

For hard to reach areas the cable can be removed from the matting and attached to the floor with adhesive tape  
**DO NOT** install thermostats on an interior bathroom wall

## LAYING THE THERMAL INSULATION

### CONCRETE FLOORS

Ensure the floor is level and dust free. A new concrete screed should be well cured prior to laying **ECOMAX** board. A bed of flexible tile adhesive should be applied to the floor using a notched trowel. Lay the boards in a staggered brick work pattern butting the edges together. Boards should be thoroughly bedded, ensuring that no air pockets remain.

A waterproof joint can be made using silicon sealant before butting the board edges together. When the adhesive is dry, board joints can be taped with a fibreglass reinforcing scrim tape.

### WOODEN FLOORS

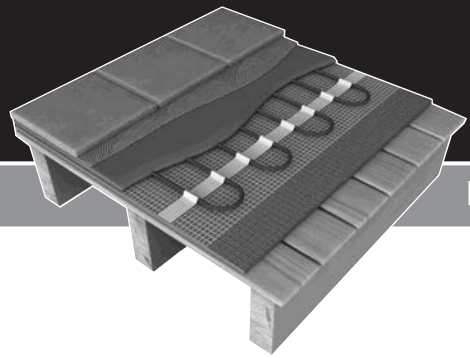
Boards can be laid onto a flexible tile adhesive. A bed of flexible tile adhesive should be applied to the floor using a notched trowel. Lay the boards in a staggered brick work pattern butting the edges together. Boards should be thoroughly bedded, ensuring that no air pockets remain.

10mm boards can be mechanically fixed to flat and level timber floors using mechanical fixings (at 30cm centres) using stainless steel screws with penny washers under their heads. These should be screwed down until the washer grips the boards cementitious surface. Joints can be taped with a fibreglass reinforcing scrim tape.



**Note:**

6mm boards should NOT be mechanically fixed to the floor

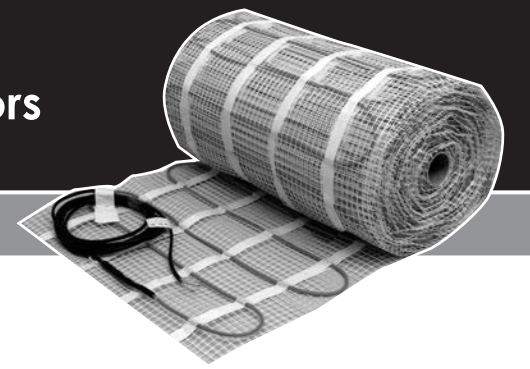


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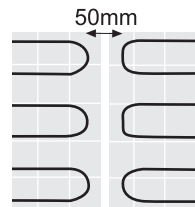
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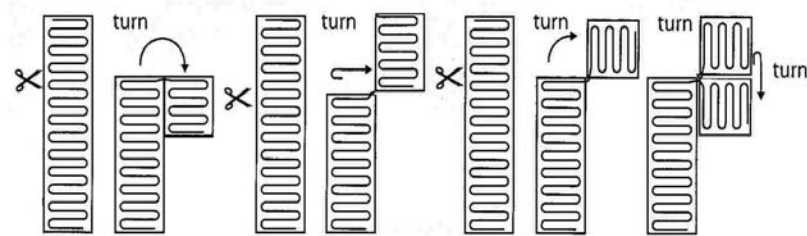


### LAYING THE MAT

When rolling out the mat and you reach the end of a run, simply cut the backing mesh (**NOT** the orange cable) and turn through 180 degrees. The mat is unrolled in the opposite direction ensuring a **MINIMUM SPACING OF 50MM BETWEEN THE CABLE LOOPS**. When satisfied with the proposed layout stick the matting to the floor using the integral self adhesive fixing strips.

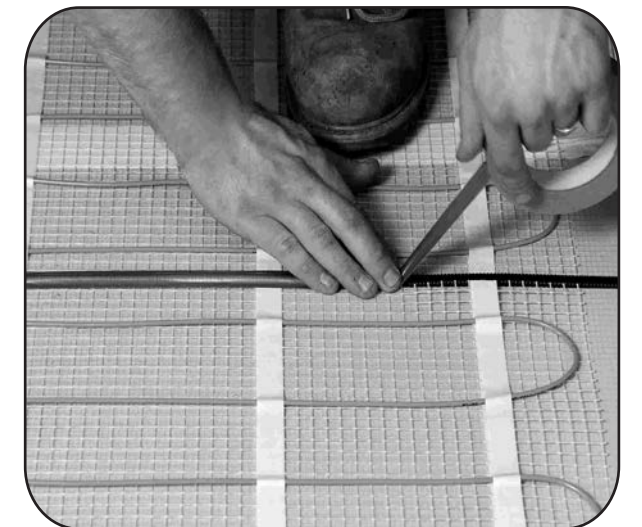


Unroll cable mat & attach to floor using self adhesive strips



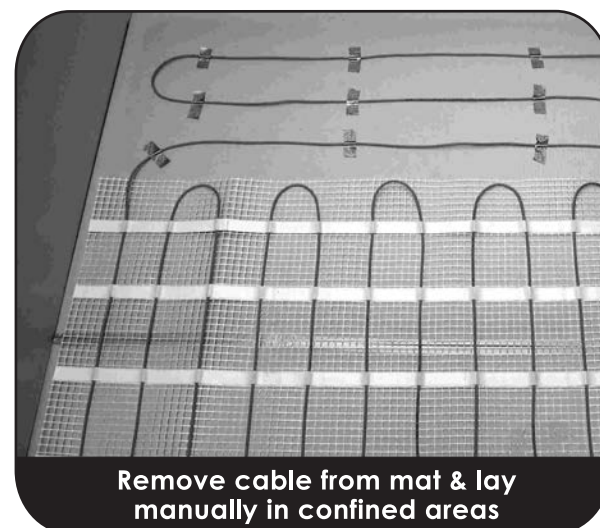
### INSTALLING THE FLOOR PROBE

Cut a groove in the floor to accommodate the floor sensor for the thermostat. Before laying the sensor check the resistance using an Ohm meter. The sensor should then be installed in the 12mm flexible conduit supplied with the thermostat. Seal the end of the conduit with tape to prevent adhesive entering. The sensor should be positioned between 2 heating cable loops under the mat approximately 500mm from the wall. The existing floor should then be prepared as normal for tiling. The entire floor should be swept clean and be free of any sharp projections. The floor surface should then be primed to accept the tile adhesive if required.



### ADJUSTING THE MAT

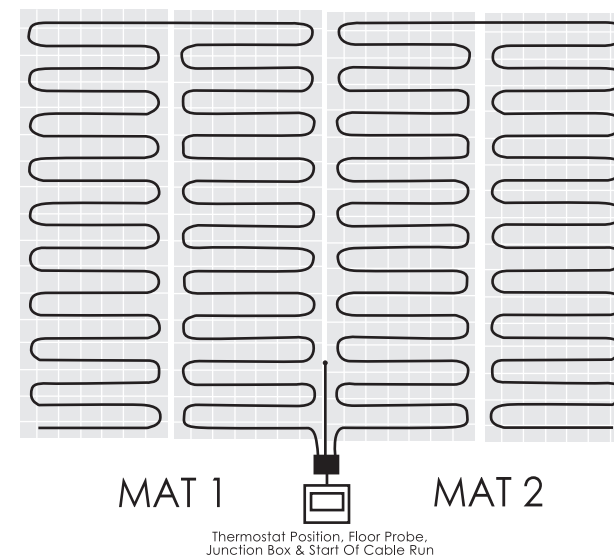
For areas that will not accommodate the full mat width of 500mm the cable can be removed from the matting and attached to the floor uniformly with adhesive fixing tape. The matting can be further secured to the floor by hot glue gun, staple gun or adhesive tape. This is recommended on the outer edges of the matting when using self leveling compound to prevent the mat lifting. These additional fixing methods should only be used on the matting and **NOT** on the cable.



Remove cable from mat & lay manually in confined areas

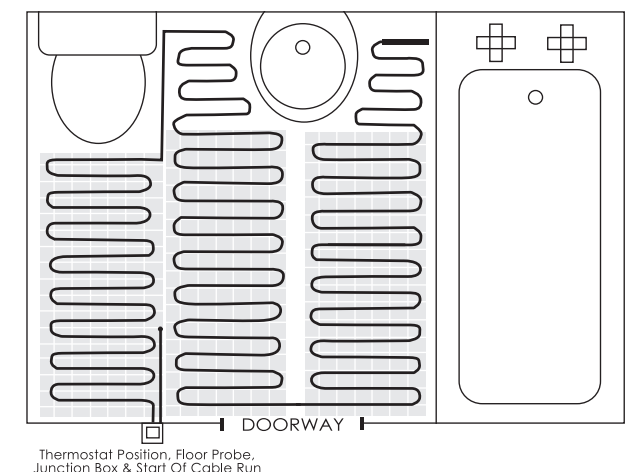
### JOINING MULTIPLE MATS

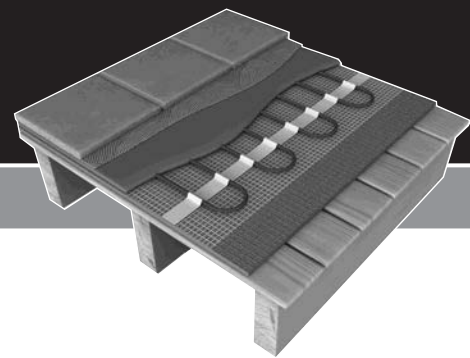
If your area to be heated is larger than the largest available mat size, **ECOFLOOR** cable mats can be simply wired in parallel.



### EXAMPLE MAT LAYOUT

**Note:**  
When spreading the floor adhesive use the trowel in the same direction as the cable runs to avoid damaging the cable.  
**DO NOT** install a thermostat on an interior bathroom wall.



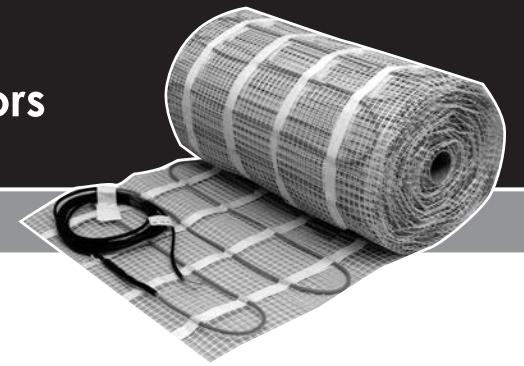


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# COMPLETING YOUR INSTALLATION

### There are two recommended methods of covering the cable mat.

#### Concrete or wooden floors using flexible tile adhesive

Working with a width of mat at a time, apply flexible tile adhesive on top of the mat so that it is completely covered, ensuring that there are no air pockets. This should be done using a rubber backed trowel or similar, taking care not to damage the cable. Once dry another layer of adhesive can then be applied carefully using a notched trowel to comb the adhesive before laying the tiles.

#### Concrete and wooden floors using self-leveling compounds

An alternative method for all but the smallest installation is to cover the cable mat installation with a suitable latex self-leveling compound. This product will find its own level and once dry will provide a suitable flat surface to apply a layer of flexible tile adhesive before laying the tiles.



#### Note:

- i) The heating cable must not be cut or shortened and the joint between the cold tail (black) cable and the (Orange) heating cable must not be bent or put under strain. Orange heating cables should never cross or touch (50mm gap min) and must be installed in the floor.
  - ii) Always wear rubber soled shoes when walking on the cable mat and avoid any unnecessary traffic over the area until the cable is completely protected under a screed or layer of adhesive.
  - iii) A fully qualified Electrician must now make the final connections to the mains supply and install the thermostat. The thermostat should be installed in the room to be heated. For bathrooms or shower rooms the thermostat must be placed outside the room but as close to the installation as possible. Control of the heated floor in this application is provided by the floor sensor only.
- Finally the Electrician should check for continuity of the floor sensor and retest the resistance of the cable. A further installation test should be carried out in accordance with IEE regulations. The installation should be protected by a 30mA RCD for safe operation.

## SWITCHING ON

Consult the adhesive manufacturer's instructions to determine a suitable drying out period before turning on the system. Once the adhesive and grout has completely dried, operate the system at a reduced temperature, gradually increasing it over a 7 day period to full operation.

## WARRANTY

Following installation, the form on the back of this installation guide should be **FULLY** completed, including a plan of the mat lay-out and position of the floor sensor. This could then be used for locating the cable mat in warranty claim situations. This booklet should then be permanently fixed in or near the installation distribution board.

## HEAT-UP TIMES

The speed of response of your **ECOFLOOR** system depends on several factors including subfloor construction and tile material and thickness.

The table below provides indications of heat-up times for various sub-floor constructions.

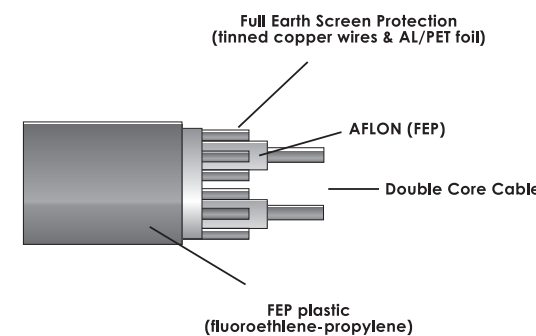
Sub-floor Construction	Heat-Up Time (hrs)
<b>ECOMAX</b> insulated tile backer board (10mm) on timber	0.5
Concrete Screed Floor (Insulated under screed)	2-5
Un-Insulated Concrete	3-8+
Concrete with <b>ECOMAX</b> insulated tile backer board (10mm)	1

# TROUBLESHOOTING

Should you experience any problems with your **ECOFLOOR** installation not warming your floor surface please carry out the following tests before calling the Flexel International Ltd technical support team.

STEP	TEST	OUTCOME	ACTION
1	Check for a 230V supply to the thermostat at terminals 1-5 <b>(TH232 thermostat only)</b>	230V	If no voltage present check supply
2	Set the thermostat to the highest position and test for a 230V output on terminals 3 and 4. This may take a few minutes	230V	Firstly, check the resistance of the floor sensor(step 3). If the floor sensor is normal the thermostat is faulty. Contact your supplier.
3	Turn off power to thermostat and test floor limit sensor resistance	Approximately 8-12K $\Omega$ for temperatures 20-30°C	If sensor is faulty, contact your supplier for a replacement
4	Turn off power to the thermostat and measure mat resistance	20-755 $\Omega$ depending on mat size (see mat label)	If mat is faulty or the mat has been damaged. Contact your supplier.
5	Turn off power to the thermostat and ensure there is no continuity between the conductors and the earth screen	No	If there is continuity between the conductor and screen, the mat has been damaged. Contact your supplier

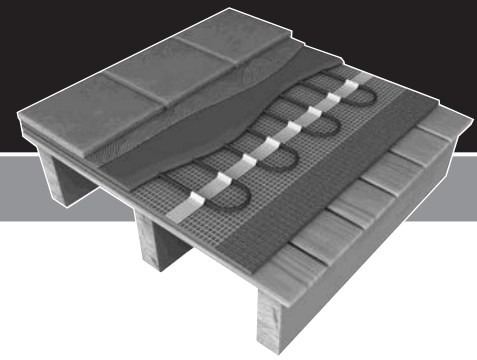
## CABLE CONSTRUCTION



- Power Loadings Available - 150W/m<sup>2</sup>, 200W/m<sup>2</sup>
- Diameter - 3.6-4.6mm
- 230V supply
- Twin conductor cable
- 1 x 3m cold tail connection lead

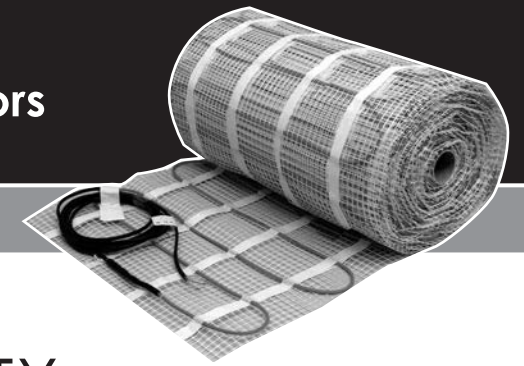
## INSULATION BOARD TECHNICAL DATA

Dimensions	600mm x 1200mm (0.72m <sup>2</sup> each)
Thickness	6mm or 10mm
Weight (kg/board)	1.8(6mm) 2.0(10mm)
Material	Extruded Polystyrene core with Polymer cement outer skin
Density	32Kg/m <sup>3</sup>
Thermal Conductivity	0.029W/m <sup>2</sup> k
Compressive Strength	300kN/m <sup>2</sup>
Water Absorption (immersion)	<1.5% by vol
Water Absorption (capillary)	Nil
Co-efficient of Linear Expansion	0.07mm/mK
Flammability	B1



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# OPERATING MANUAL

Operation of your **ECOFLOOR** heating system is similar to other conventional heating systems. Your method of control is via the wall mounted room thermostat. Set the thermostat to your desired temperature and the system will warm the room. There are several points to consider when operating your system to ensure economical operation:

- Following installation of your **ECOFLOOR** heating system there are several precautions you should take on initial start-up of the heating system.

Do not be tempted to turn on the system immediately after laying the finished floor. Depending on the floor covering please allow time for the adhesive or leveling compound to cure completely (see manufacturers guidelines, usually 14 days). Bring the system up to temperature gradually in stages over the next few days using the floor limit sensor temperature setting.

- Each room installed with an **ECOFLOOR** heating system will have its own thermostat. This means that you can individually set the room temperature based on the use of the room. If the room is rarely used, turn the thermostat down to a lower level to conserve energy.
- Your **ECOFLOOR** heating system is a direct acting system. However depending on the subfloor and the floor covering installed there may be a certain amount of thermal lag in the system ( heat-up and cool down periods). Please anticipate these when switching your system on and off. Careful time clock control of on/off periods ensures maximum comfort at minimum cost.
- Although your radiant heating system is less effected by air change/ventilation losses than a traditional convection heating system it is good practice to minimise drafts from open doors or windows as these can make occupants feel cold.
- Set the thermostat to your desired comfort level and leave it. Setting the thermostat to a high temperature will not make the room get up to temperature quicker. It will merely over heat the occupants once the set temperature is reached.
- Thermostats are fitted with floor limit sensors. The temperature of the actual floor can be varied to suit individual comfort levels. We recommend a maximum floor temperature setting of 28°C for optimum comfort conditions.

### Be Aware

Although your **ECOFLOOR** Heating system requires no annual maintenance, care should be taken to ensure that the system is not damaged. Additional information for renovating and repairing is available in the system's installation manual.

- Never pierce the floor . Piercing an electrically conductive cable with a nail or screw fixing can trigger the RCD unit and cut all power to the system.
- Never cover any heated part of the floor with walls, solid or permanent floor fixed furniture. This could trap heat and potentially cause local overheating.
- Thick rugs, dog beds, bean bags, exercise mats and items with high thermal insulation should not be laid on the heated floor as this may cause localised overheating

### Information for repair or renovation tradesmen

Please inform all repair or renovation tradesmen if they are working in the area of an installed **ECOFLOOR** system. They should read the information contained within the installation and operating manual before commencing work. Failure to comply with this information may result in risk of electric shock.

# FLEXEL LIFETIME WARRANTY

**Congratulations** on the purchase of your new underfloor heating system. Now you can relax and enjoy your new heated floor provided by Flexel.

By purchasing your new Flexel underfloor heating system you are provided with the assurance that this product is manufactured to the highest standard and should there be a fault due to defective design, material or workmanship within 10 years of purchase, the product will be repaired or replaced free of charge to yourself.

You have the option to extend this warranty to a lifetime warranty by registering online at [www.flexel.co.uk/warranty](http://www.flexel.co.uk/warranty)



Should a claim be made, the completed warranty form and proof of purchase will be required.

A normal invoice/receipt stating the exact model(s) purchased is sufficient for this purpose.

You must provide all of the details requested on pages 12-14 of this instruction manual.

The Flexel warranty covers ECOFLOOR cable mats providing the following terms and conditions are met:

### Terms and conditions

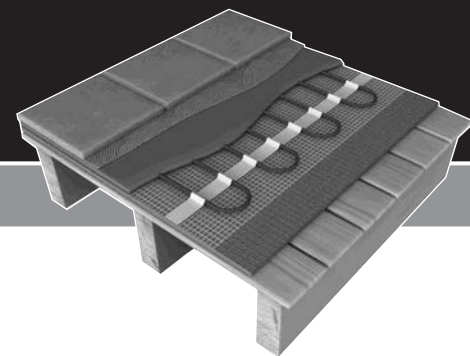
The lifetime warranty will cover the heating cable once the original 10 year warranty expires and is valid for the lifetime of the original floor covering under which it is fitted.

- To activate the lifetime warranty, registration must be made within 90 days of purchase. The lifetime warranty is only valid once you receive a confirmation email from Flexel.
- Neither extended warranty applies if the original floor covering over the heating cables is flooded, damaged, lifted, replaced or covered with subsequent layers of flooring.
- The system must be installed in accordance with the installation instructions and be protected by a suitable residual current device (RCD).

- Flexel International Limited will in no event be liable for secondary charges relating to the repair or replacement of any floor covering or any consequential or incidental damages including but not limited to damages to property or extra utility expenses.

Flexel International Limited cannot be held liable for:

- Any damages due to incorrect installations or applications.
- Any accidental damage or damage caused during installation.
- Damage as a result of fires, accidents, storms, any 'acts of god' or any conditions which may be outwith the control of Flexel.

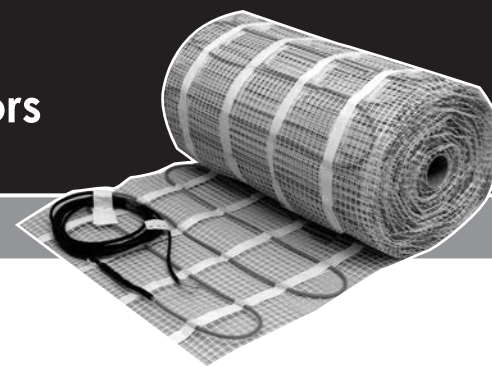


# ECOFLOOR - The complete electric underfloor

Installation is straight forward. However, if you require assistance

# heating solution for all tile and stone floors

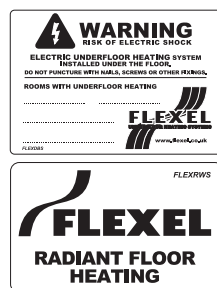
call our dedicated technical team now on 01592 760928



## ECOFLOOR INSTALLATION PLAN

To ensure the validity of your warranty and the compliance to the 17th Edition wiring regulations (BS7671:2008) please provide a plan layout of your ECOFLOOR underfloor heating installation. Flexel have provided an example opposite and a tickbox checklist to ensure this procedure is carried out correctly.

This sketch should be left next to the distribution board of the heating system together with thermostat user instructions, warranty certificate, original sales receipt and supplied sticker (see opposite) for the distribution board to alert users of the installation. A second sticker (see opposite) should be placed in the room with the heating system.



### Part 1 - To be completed by the cable mat installer

What are the room dimensions?  What is the heated area?

What is the product code(s) of the ECOFLOOR mat installed?

Have you marked the position of the junction box on the sketch?

Have you marked the position of the thermostat box on the sketch?

Have you marked the position of the floor probe on the sketch?

Have you marked the position of the cable turns?

### Part 2 - To be completed by the Electrician

What is the measured resistance of the installed ECOFLOOR mats (Ohms)?

Mat 1   $\Omega$  Mat 2   $\Omega$  Mat 3   $\Omega$

What is the total measured resistance of the mats connected in parallel (Ohms)?   $\Omega$

What is the total power of the installation (W)?  W

What is the insulation resistance?  What was the test voltage used (V)?  500V

What is the RCD rating (ma)?  30mA What is the rated voltage (V)?  230V

Please provide a detailed layout plan using the example to the right as a guide.

Take care to show the following:

- Product used
- Thermostat position
- Junction box position
- Start and end of cable run
- Floor probe position
- Any fixed furniture/ fittings
- Room dimensions

