

ECOFILM^{PRO} - The complete electric underfloor heating solution for all wood and laminate floors



Installation is straight forward. However if you require assistance

call our dedicated technical team now on 01592 760928

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Congratulations on your purchase of this ECOFILM^{PRO} Underfloor Heating Kit , the ideal solution for heating laminate, engineered board and solid wood floating floor coverings.

Please read the following instructions carefully to ensure ease of installation. Remember that this is an electrical heating system for *PROFESSIONAL* installation only. It must *ONLY* be installed by a qualified Electrician. If you are not a professional Electrician or cannot arrange for professional installation of this product please return this kit to the place of purchase for a refund.

Flexel also manufacture a similar heating system (ECOFILM^{SET}) which is more suitable for DIY installation with only the final electrical connection required by a suitably qualified installer. Please see www.flexel.co.uk for more information.

Easy To Install

By following these simple instructions, you will be able to install the ECOFILM^{PRO} underfloor heating system without any difficulties.

Install Almost Anywhere

ECOFILM^{PRO} can be installed on top of either suspended timber floors or solid concrete floors enabling installation in many dry room types. ECOFILM^{PRO} can also be installed under many floating floor coverings including: laminate, engineered wood and solid timber floors.

Maintenance Free, Safe, Overall Warmth

Totally safe, under laminate and timber floors, ECOFILM^{PRO}'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 heat distribution. Once installed it is completely maintenance free.

How Effective is Under Laminate Heating?

ECOFILM^{PRO} is a highly effective, direct acting radiant heating system. It can be used as a substitute to traditional convector radiators by providing primary heating or used to warm a cool floor & provide background heat.

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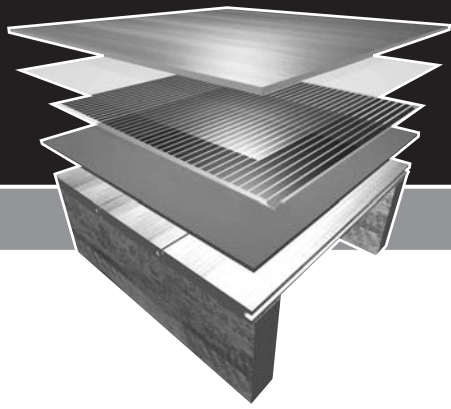
www.flexel.co.uk

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

The ECOFILM^{PRO} Underfloor Heating Kit is part of the Flexel Underfloor Heating Systems product range by Flexel International Ltd, Queensway Ind Est, Glenrothes, Fife, KY7 5QF, Scotland.

Tel 01592 760928 Fax 01592 760929 Email enquiries@flexel.co.uk

Flexel International Ltd, the manufacturer of the ECOFILM^{PRO} Underfloor Kit 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.

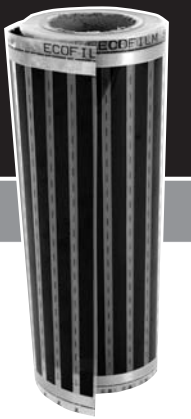


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PRE-INSTALLATION CHECKLIST

Please take time to carefully read the following notes and instructions before commencing installation:

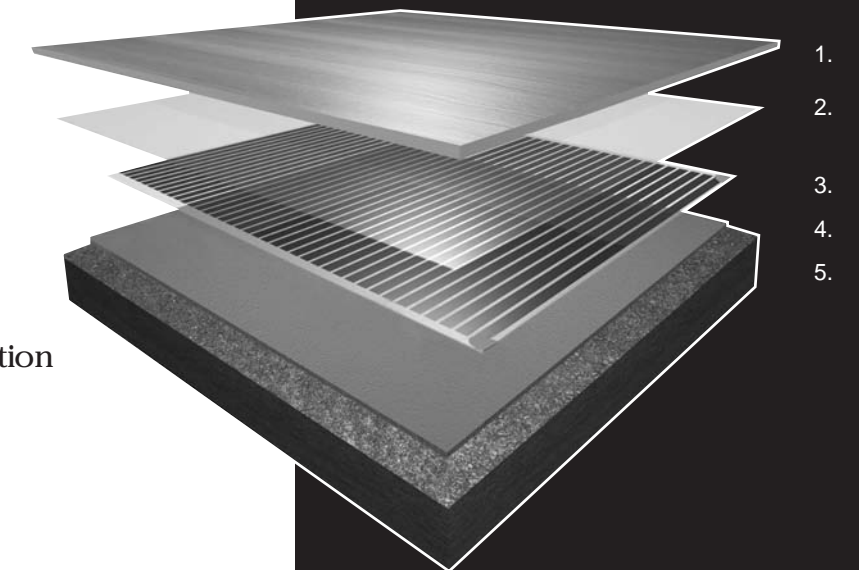
- ECOFILM^{PRO} underfloor heating kits are designed to be used under laminate, engineered board and a solid wood floating flooring with a maximum thickness of 18mm (or thickness equivalent to a maximum thermal resistance of 0.15m²K/W). When underlay is specified by the floor covering manufacturer this may reduce the thickness of flooring permitted. Always check to ensure the flooring is suitable for use with electric underfloor heating systems.
- ECOFILM^{PRO} underfloor heating kits operate on a standard 230 Volts mains electrical supply. Maximum loading is 130W/m² for standard product.
- ECOFILM^{PRO} underfloor heating kits must be protected by a 30mA RCD (residual current device) and a suitably rated fuse or MCB (miniature circuit breaker).
- ECOFILM^{PRO} must only be installed in dry locations. Kitchens and utility rooms are considered dry locations. It is not suitable in bathrooms or shower rooms.
- ECOFILM^{PRO} underfloor heating kits must NOT be installed under walls or partitions, or in locations where they will be covered by furniture that is directly fitted to the floor.
- Thick rugs, dog beds, bean bags etc must NOT be laid on the heated floor as this may cause localised overheating and potentially damage the floor covering.
- ECOFILM^{PRO} must be controlled with a thermostat fitted with a floor temperature limiting sensor.
- Care must be taken to ensure that the ECOFILM^{PRO} underfloor heating elements are not damaged during installation. It is advisable to lay the finished floor covering immediately after installing the heating element.
- ECOFILM^{PRO} must be installed with ECOMAX-LITE as the underlay. No other insulation board underlay is acceptable. Use of a different underlay material will invalidate the guarantee.
- ECOFILM^{PRO} underfloor heating elements must be protected by ECOFILM^{PRO} polyester vapour barrier (see accessories).
- ECOFILM^{PRO} underfloor heating kits are designed to be controlled by the approved range of thermostats, EB100 (maximum power 2740W), TH132F or TH132AF (both rated at 3450W). If the installed load exceeds these figures then a suitable contactor must be installed by the electrician.
- ECOFILM^{PRO} high specification fixing tape (ADT50) must be used for installation of the ECOMAX-LITE thermal insulation, ECOFILM^{PRO} underfloor heating elements and polyester vapour barrier.
- ECOFILM^{PRO} underfloor heating kits are approved to the relevant international safety approval BS EN60335-2-96 as required by the 17th Edition wiring regulations (BS7671:2008)



The wood or laminate floor covering the ECOFILM MUST have a minimum thickness of 5mm and a maximum thickness of 18mm. When there is another thickness or any other doubt whether the wood can be used in conjunction with ECOFILM, please contact the manufacturer of your wooden floor covering.

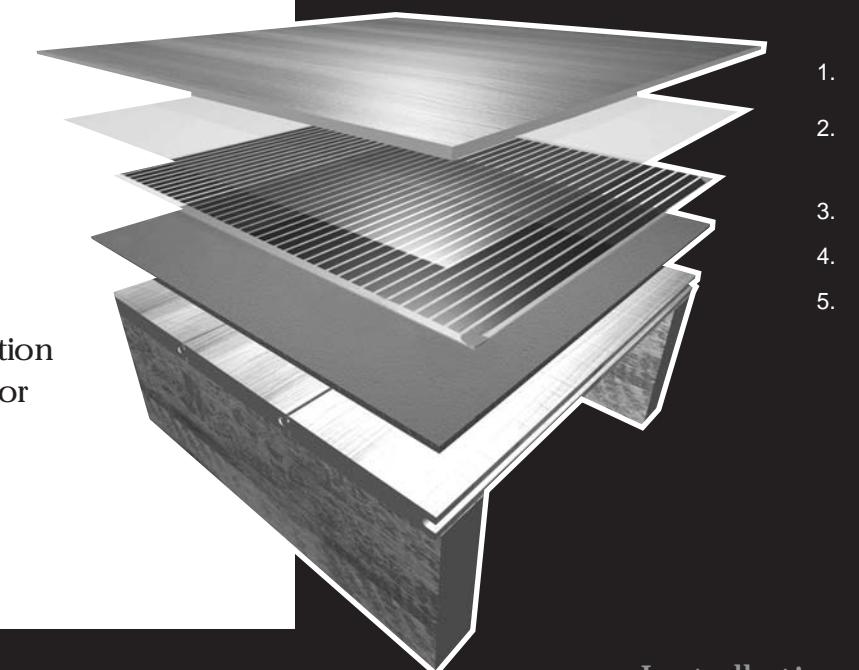
FLOOR CONSTRUCTIONS

Solid Concrete Floors

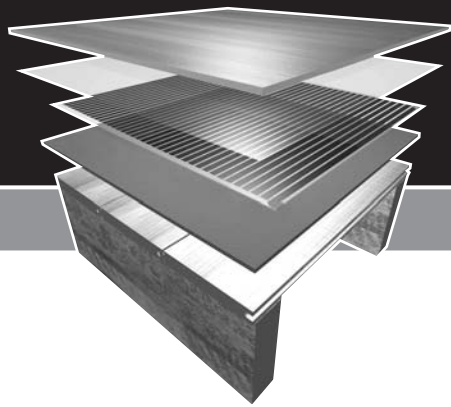


1. Wood/Laminate Floor
2. Polyester Vapour Barrier
3. ECOFILM^{PRO} elements
4. ECOMAX-LITE Thermal Insulation
5. Concrete Sub Floor

Suspended Wooden Floors



1. Wood/Laminate Floor
2. Polyester Vapour Barrier
3. ECOFILM^{PRO} elements
4. ECOMAX-LITE Thermal Insulation
5. Suspended Wooden Sub Floor



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WHAT YOU NEED

Contents of ECOFILM ^{PRO} Kit	Additional Accessories required
<ul style="list-style-type: none"> • ECOFILM Heating element rated at 130Watts/m² • 20 x Foil crimp connections • 1m x Mastic insulation tape • 15m x Double insulated power supply cable 1.5mm² - Blue • 15m x Double insulated power supply cable 1.5mm² - Brown • 20 x Green Insulation Discs • 1 x Ratchet crimping tool • Warning labels • Installation instructions 	<ul style="list-style-type: none"> • Polyester vapour barrier (PVB12 or 25) • ECOMAX-LITE 6mm thermal insulation • Thermostatic controller with floor probe • Adhesive tape (ADT50) • RCD if this is not already included in the electrical installation

APPROVED
to comply
with the
17th Edition
Wiring
Regulations



GETTING STARTED

Layout Sketch

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

Element layout

- Plan the layout pattern of the 500mm wide heating elements
- The heating elements can be placed side by side with the edges butted together. Elements should NEVER overlap.
- The heating element should cover as much of the floor as possible. A wood floor covering is not a good conductor of heat. Areas not covered with heating element will not conduct heat from neighbouring heated areas and will remain cool.
- Please leave a perimeter border of a minimum of 50mm.

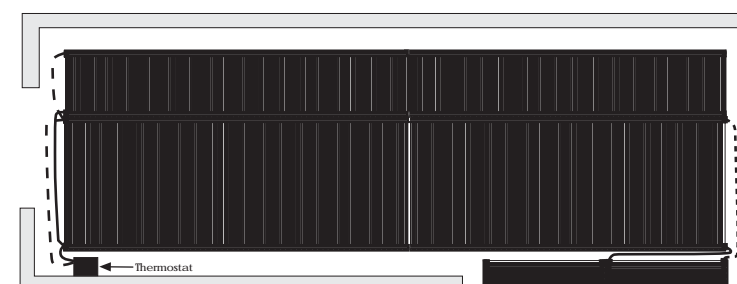
Plan the thermostat position

- The thermostat should not be placed in direct sunlight or in a position affected by drafts or an alternative heat source.
- It must be at a convenient height for the user (approx 1.4m) and near the electrical supply.

Plan the wiring

Ideally plan to run the lengths of heating element along the longest wall dimension with the supply cable junction box on the wall you plan to connect the wiring harness. This practice will minimize the amount of cabling.

Example 1.

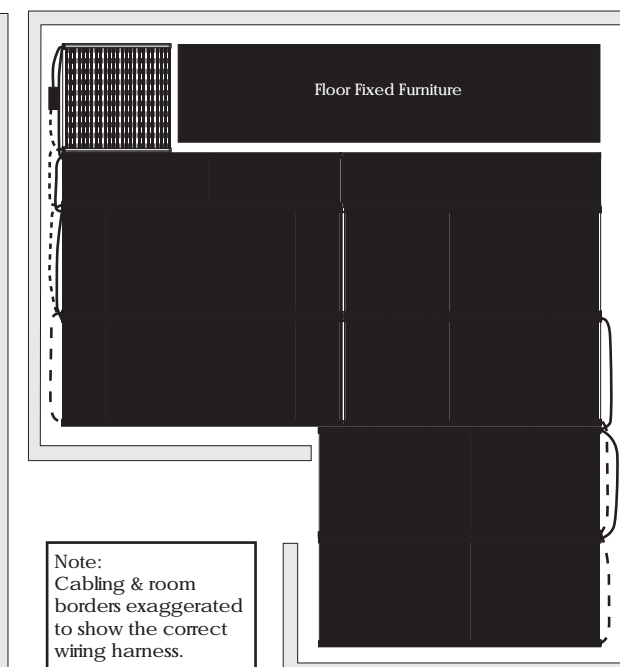


Hallways and awkward shaped rooms can be wired easily by continuing the circuit through individual elements using the supply power cabling

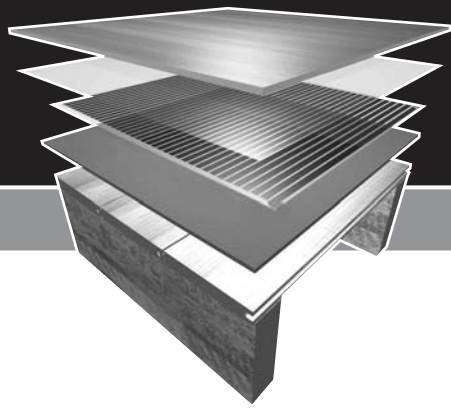


Avoid floor mounted columns by attaching power cabling to provide circuit continuity

Example 2.



Note:
Cabling & room borders exaggerated to show the correct wiring harness.



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ELECTRICAL CONSIDERATIONS

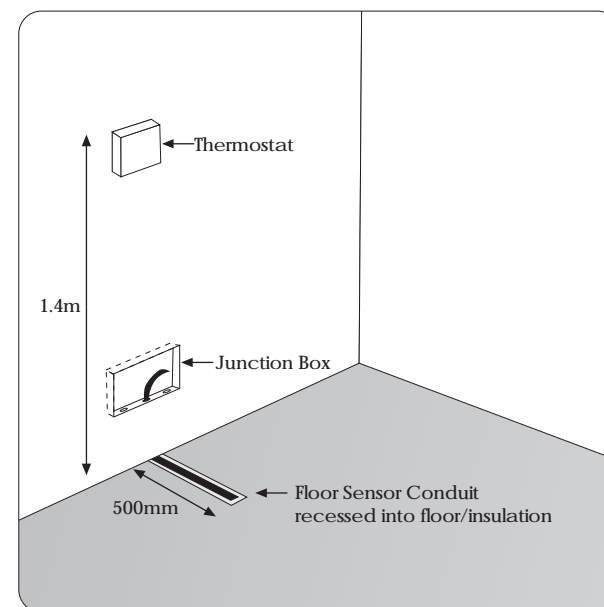
- The installed load (Watts) of the heating element **MUST** comply with the rating of the thermostat, the circuit breaker and if necessary the contactor.
- Correct wiring practice **MUST** be observed. All electrical connections **MUST** be made by a qualified electrician.
- Installation **MUST** comply to the relevant international safety approval BS EN60335-2-96 as required by the 17th Edition wiring regulations (BS7671:2008) and all current building regulations.
- The power supply cables **MUST** be positioned so that they cannot come into contact with any heated part of the ECOFILM^{PRO} element.
- The ECOFILM^{PRO} system **MUST** be installed together with a Residual Current Device (RCD) with a maximum breaking current of 30mA and a suitably rated fuse or MCB (miniature circuit breaker).
- When deciding connection layout, individual branch circuits **MUST** not exceed a rating of 10Amps.

PREPARING THE THERMOSTAT

ECOFILM^{PRO} thermostats should be positioned at a height approximately 1.4m from the floor in an area free from draughts, out of direct sunlight and close to the electrical supply. All ECOFILM^{PRO} thermostat controllers have a floor sensor which is placed in the supplied protective plastic conduit and positioned centrally below one of the heating elements at a distance of approximately 0.5m from the wall. A single gang flush fitting minimum 25mm deep back box (35mm preferred) will be required for the thermostat.

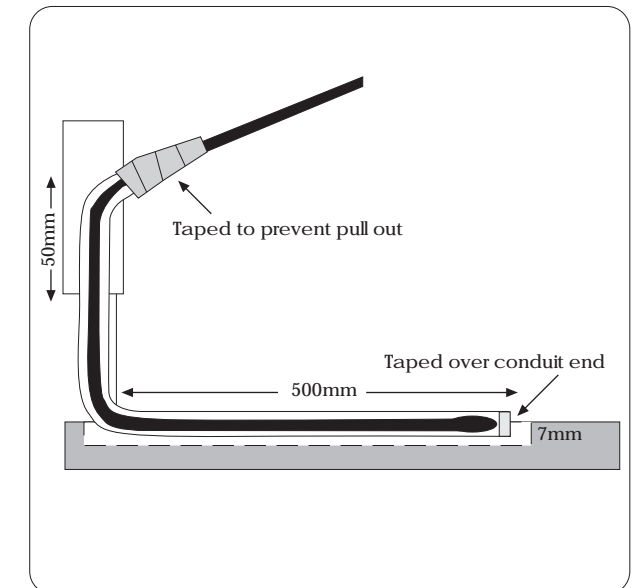
Junction Box Installation

A junction box (preferably 2 gang x minimum 25mm deep) is required for connecting the 230V mains supply to the ECOFILM^{PRO} wiring harness circuit(s). This should be sited close to the thermostat and in a position to enable all the supply cables and the thermostat sensor conduit to reach the box comfortably.



Floor Sensor Installation

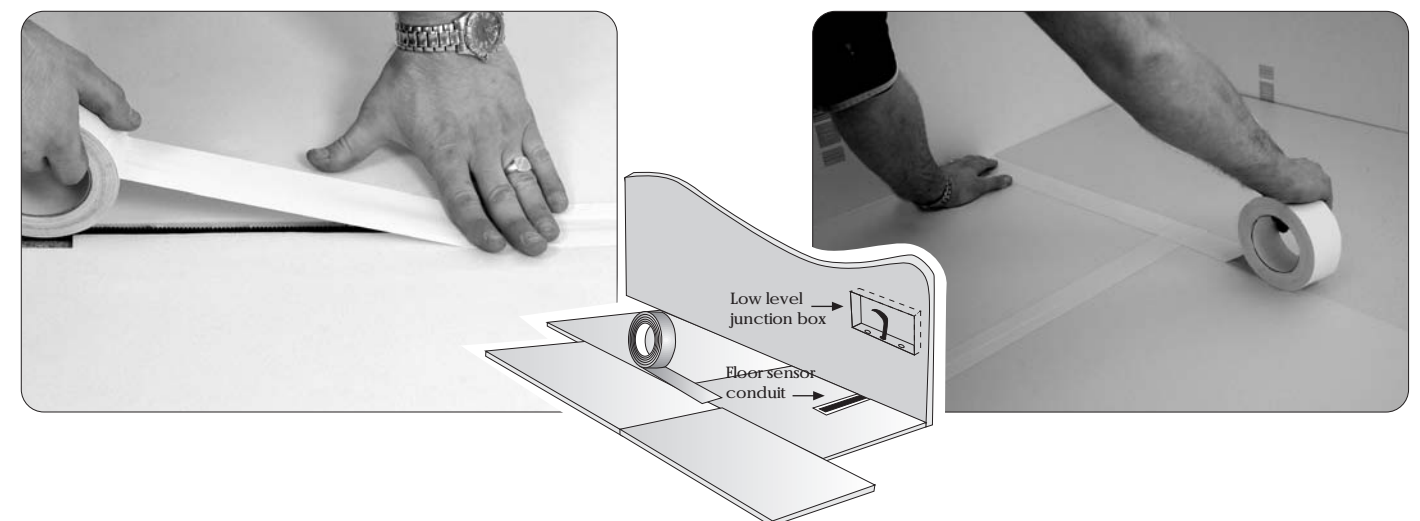
Cut a 13mm wide by 6-7mm deep channel in the subfloor to accommodate the sensor conduit so that the top of the conduit will be level with the ECOMAX-LITE thermal insulation surface when installed. Tape over the end of the conduit using a small piece of ECOFILM^{PRO} adhesive tape. Place the conduit in the channel and feed the end into the junction box. The conduit can now be cut to length leaving approximately 5cm inside the junction box. Slide the sensor into the conduit until the sensor bulb reaches the taped end. Wrap a piece of tape around the conduit and sensor cable to prevent the sensor being accidentally pulled out. Use ECOFILM^{PRO} fixing tape to hold the conduit in place in the channel.

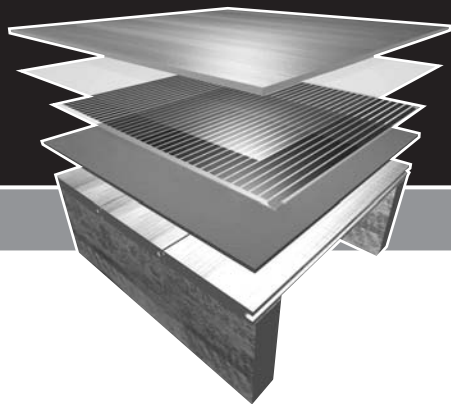


LAYING THE ECOMAX-LITE INSULATION

Thoroughly clean the existing floor area taking care to remove any sharp objects.

Lay the ECOMAX-LITE sheets in "brick work" fashion, with staggered edges (as illustrated in the drawing). Always remember to cover the total floor area with ECOMAX-LITE even unheated areas. Tape along the edges using ECOFILM^{PRO} adhesive tape (20m² of ECOMAX-LITE will require approximately 35m of fixing tape). Carefully cut a channel in the ECOMAX-LITE at the position of the sensor conduit channel using a sharp knife and straight edge. Tape over the conduit using ECOFILM^{PRO} fixing tape.



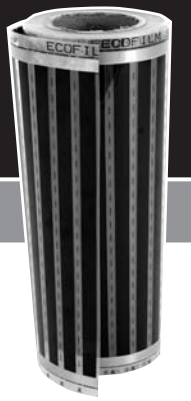


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LAYING THE ECOFILM ELEMENTS

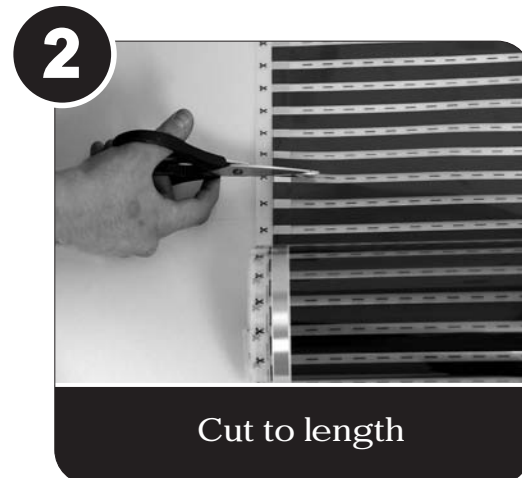
Following the plan you prepared earlier of your layout pattern, roll out the first element copper side down leaving a minimum 50mm gap from walls. Ensure the element is completely flat with no ripples or creases. Cut the element to length only along the marked cut-lines (Care should be taken not to cut closer than 3mm from the edge of the black heated area). Insulate the cut ends of the edge mounted, copper connector bars with the green insulation discs supplied.

Once happy with the position of the cut length of ECOFILM, tape it to the floor insulation using adhesive tape (see accessories). This will prevent movement of the film during final floor covering installation. It is important that the element is fixed in position as individual lengths should never be allowed to overlap as this would potentially lead to "hot spots" and localized overheating.

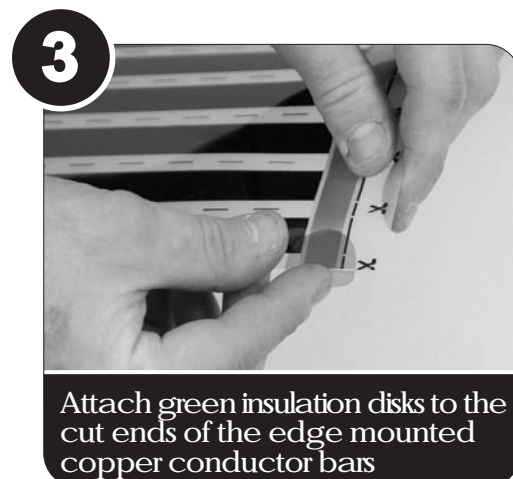
Roll out the next heating element panel parallel to the first. Fix in position with tape to the floor insulation. The elements can be butted together but **MUST** never overlap.



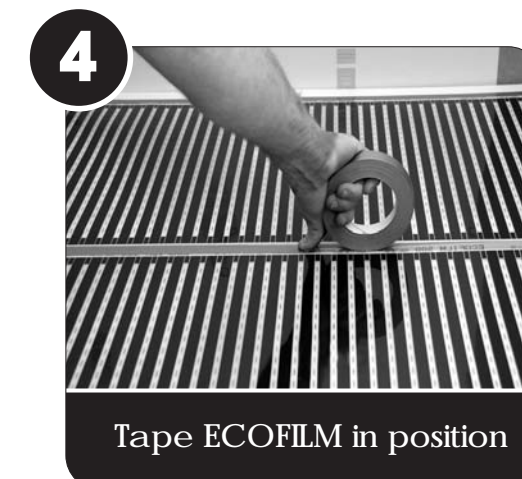
Unroll the ECOFILM



Cut to length



Attach green insulation disks to the cut ends of the edge mounted copper conductor bars

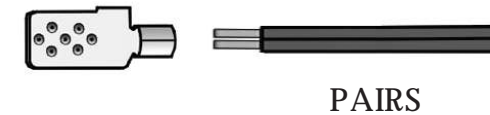


Tape ECOFILM in position

ATTACHING THE POWER SUPPLY CABLE

When the sub-floor surface has been covered with Ecofilm heating element as per your plan. Install the "cold tail" or power supply wiring.

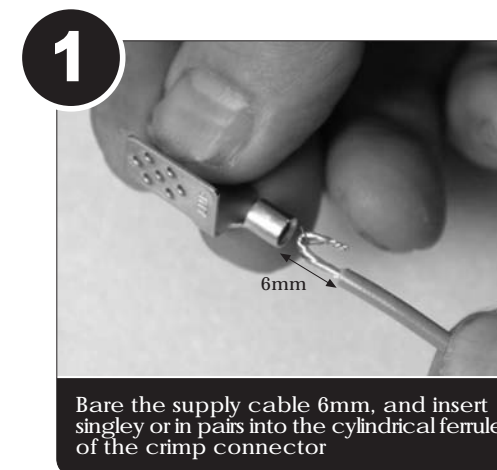
Remove the double layer of insulation from the supply cable to expose 6mm of bare wire. Insert singly or in pairs into the cylindrical ferrule of the crimp connector. Supply cables from the elements to the thermostat position must be securely positioned and taped so that they cannot come into contact with any part of the element.



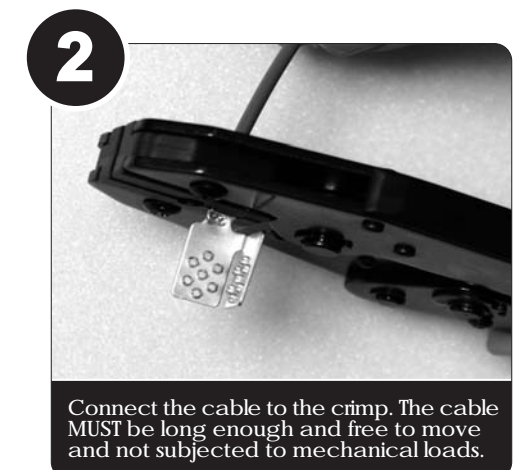
PAIRS



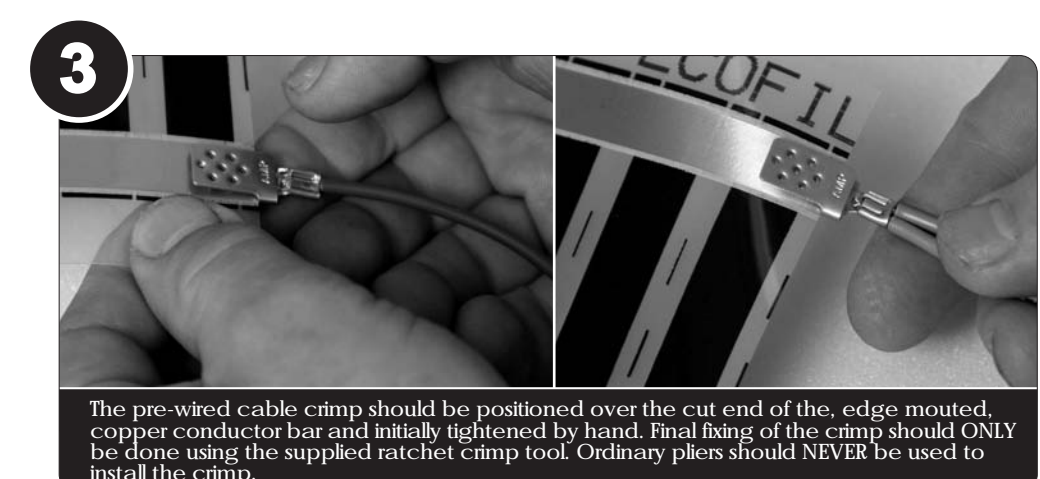
SINGLEY



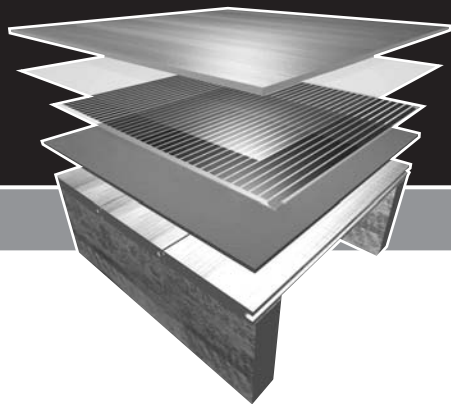
Bare the supply cable 6mm, and insert singly or in pairs into the cylindrical ferrule of the crimp connector



Connect the cable to the crimp. The cable **MUST** be long enough and free to move and not subjected to mechanical loads.



The pre-wired cable crimp should be positioned over the cut end of the, edge mounted, copper conductor bar and initially tightened by hand. Final fixing of the crimp should **ONLY** be done using the supplied ratchet crimp tool. Ordinary pliers should **NEVER** be used to install the crimp.



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The metal crimp connectors with cables attached can then be fixed to both copper conductors at one end of the element taking consideration of wiring colour convention. The crimp should be fitted to the element using the supplied ratchet crimping tool. This should be done with TWO DIAGONAL APPLICATIONS.

Firstly from the hinge side of the crimp and then from the open side, to ensure that the whole area of the crimp is in contact with the element and pressed flat. Fitting the crimp with the barrel to the same side as the copper electrode will assist locating the wiring harness.



Crimp first from the hinge side of the crimp

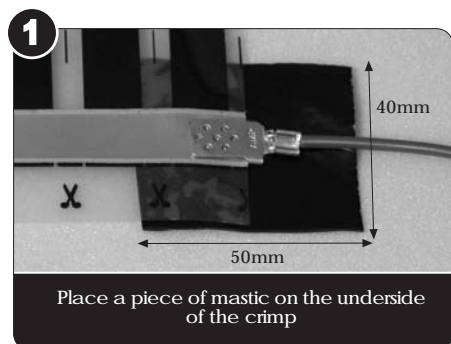


Next crimp from the open side of the crimp

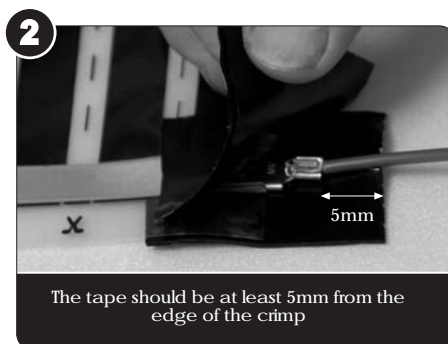
Insulating the Crimp

The crimp connection should be insulated with the mastic tape provided in the kit. Cut 2 pieces of mastic tape 50mm x 40mm

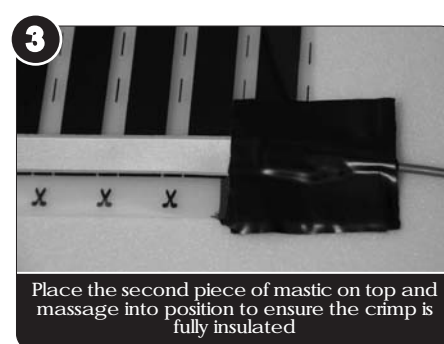
Place the mastic on both sides of the crimp connector and knead/massage into position making sure the connector is completely covered and safely insulated. The mastic coverage should extend at least 5mm past the edges of the crimp.



Place a piece of mastic on the underside of the crimp



The tape should be at least 5mm from the edge of the crimp



Place the second piece of mastic on top and massage into position to ensure the crimp is fully insulated

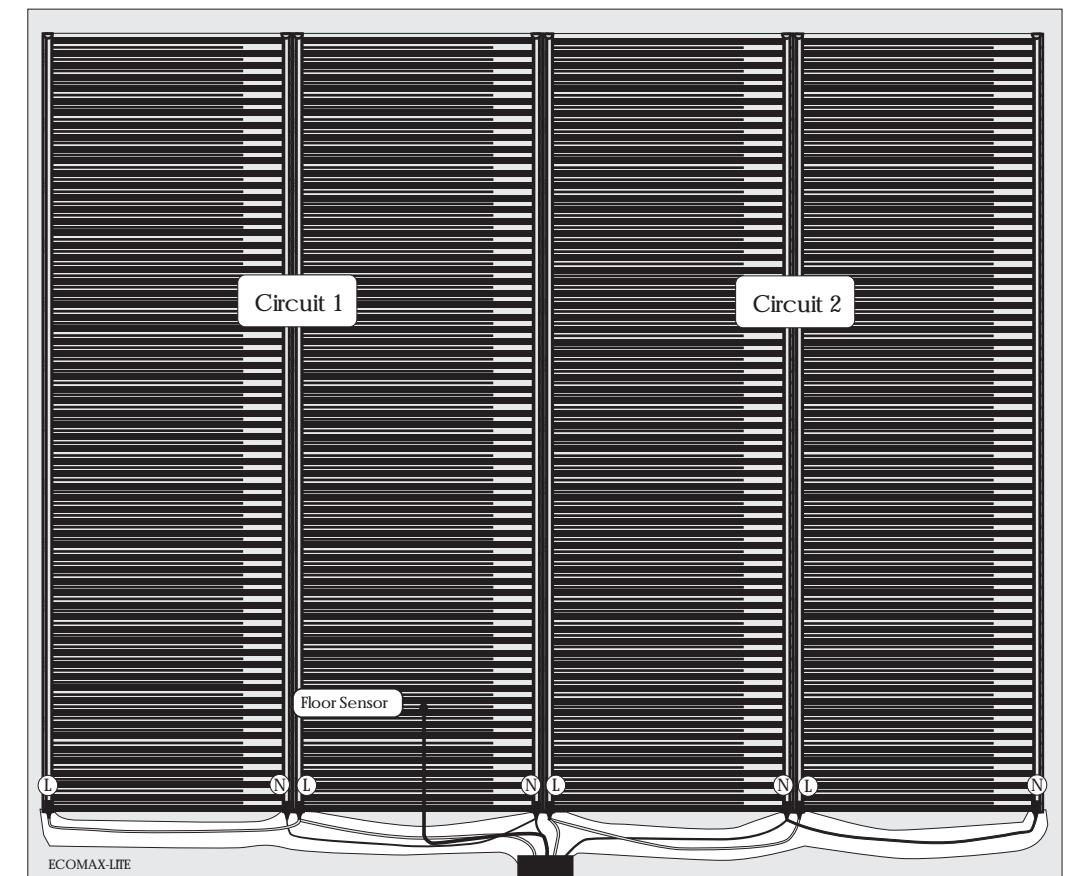
Recessing the Wiring Harness

The power supply cable should be recessed into the floor by cutting channels, using a sharp knife, into the ECOMAX-LITE insulation underlay. Run the cable in the channel to the junction box. Once positioned they should be fixed in position with tape. Take care not to allow the cold tail cable to pass under the heating element.

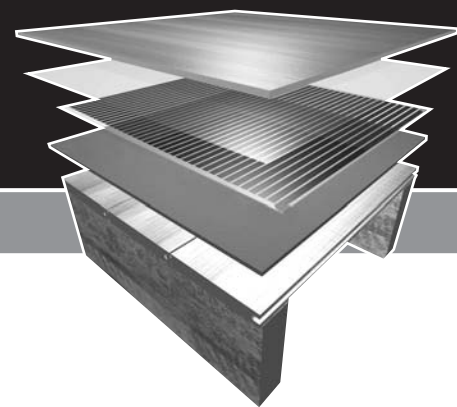


TYPICAL LAYOUT SHOWING 2 CIRCUITS

- The maximum current through any individual circuit should NOT exceed 10Amps. If the total current exceeds 10Amps the installation should be divided into multiple circuits.
- It is good practice NOT to exceed 30 linear meters of element in any one circuit.
- Cables MUST not pass under the ECOFILM elements.
- Cables are recessed into the ECOMAX-LITE thermal insulation and taped in position.
- Multiple cable circuits are connected in parallel in the junction box.



Thermostat & Low Level Junction Box



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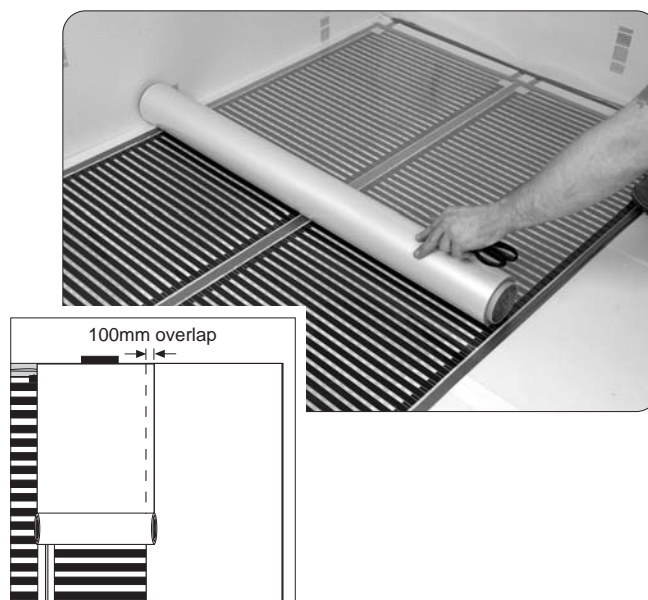
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INSTALLING VAPOUR BARRIER & MAKING CONNECTIONS

Laying ECOFILM^{PRO} Polyester Vapour Barrier

The installed ECOFILM^{PRO} heating kit must be covered with the ECOFILM^{PRO} polyester vapour barrier to provide optimum moisture and additional mechanical/electrical protection. ECOFILM^{PRO} polyester vapour barrier is available in 1m x 25m rolls (PVB25) which will cover approximately 22m² when installed and 1m x 12m (PVB12) rolls which will cover approximately 10m² when installed.

To install, roll out the vapour barrier, cut to length and overlap adjacent pieces by a minimum of 100mm. Tape along the entire length of the overlap using ECOFILM^{PRO} fixing tape. Always remember to cover the entire floor with the vapour barrier, even unheated areas.



Wiring Harness Power Connection

Cut the supply cables inside the junction box to approximately 100mm. Carefully strip back 10mm of the cable insulation taking care to completely remove the clear inner insulation.

Please note: if the installed load exceeds the thermostat controller power rating then a suitable contactor must be used.

Measure and record the total installed load resistance and carry out an insulation check to ensure no damage to the elements has occurred during installation. A second insulation resistance measurement should be taken once the flooring has been laid. Both measurements should be at least 10M Ohms.

Calculate the actual power using measured resistance with the formula :

$$\text{Actual Power (W)} = 52900 / \text{measured resistance } (\Omega)$$

Measure the total length of the heating element and calculate the total power rating with the formula:

$$\text{Total power rating (W)} = \text{total length (m)} \times 130 \times 0.47$$

Thermostat Installation

Install the thermostat following the manufacturers instructions and carry out an operational test, taking time to check and adjust the floor sensor limiting temperature if required.

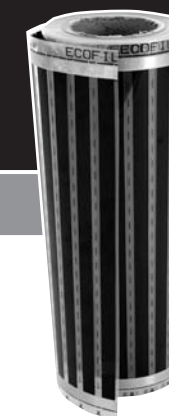
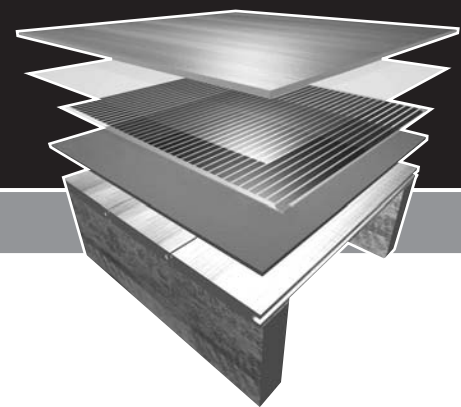
Finally complete the test report and guarantee certificate ensuring all measurements are correctly recorded and leave all documentation including the thermostat instructions next to the electrical supply distribution board.

Remember the guarantee must be filled in and kept with a proof of purchase to ensure you are covered by our 10 year guarantee.

TROUBLESHOOTING

Should you experience any problems with your ECOFILM^{PRO} installation not warming your floor surface please carry out the following tests before calling Flexel International Ltd.

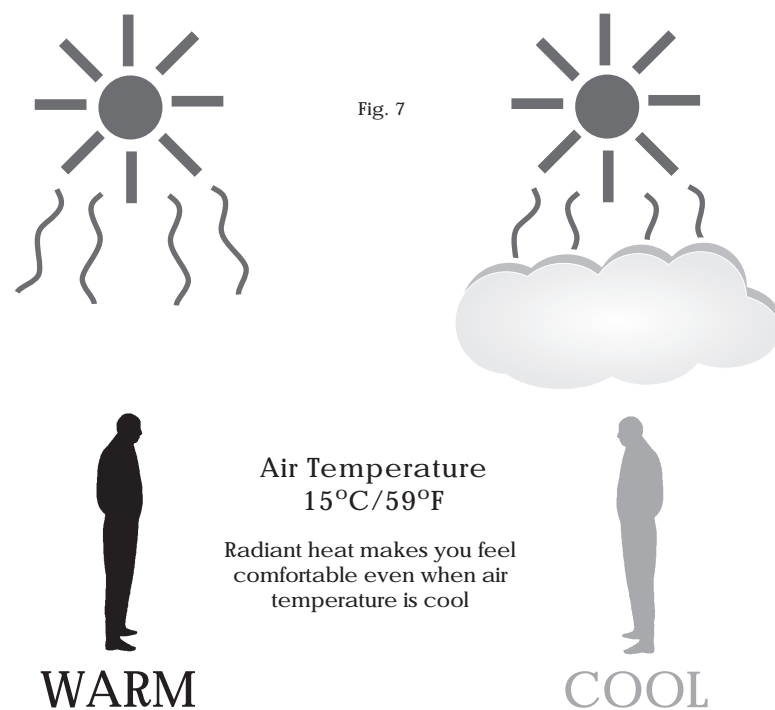
STEP	TEST	OUTCOME	ACTION
1	Check for a 230V supply to the thermostat at terminals 1-5 <i>(EB100 thermostat only)</i>	230V	If no voltage present check supply
2	Set the thermostat to the highest position and test for a 230V output on terminals 3 and 4. This may take a few minutes	230V	Firstly, check the 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 Ω for temperatures 20-30°C	If sensor is faulty, contact your supplier for a replacement



WHAT IS RADIANT HEAT?

The Flexel radiant floor heating system installed in your home is the most efficient electric heating system available today. The ECOFILM^{PRO} system installed directly below your floor, gently warms the objects and people in the room. These surfaces include walls, windows, floors and ceilings. These surfaces then gently warm the surrounding air, creating a more natural warmth with minimal floor to ceiling temperature variation. This means that the air temperature can be lowered in the room whilst still maintaining comfort levels - this results in a reduction in heating bills over other forms of electric heating systems.

This manual is provided to help you understand how your heating system works and therefore how to operate it to maximum efficiency.



The ECOFILM^{PRO} underfloor heating system works just like the sun. The heating elements warm the floor surface which then emit energy in the form of infrared heat. This is the same type of heat you feel when out on a sunny but a cool spring day. Although the air temperature is cool the infra-red rays from the sun keep you warm.

The ECOFILM^{PRO} radiant heating system is the most efficient form of heat distribution available. The radiant heat in the form of Infra-red energy radiant throughout the room. The objects and occupants are heated first and then gently warm the surrounding air. As the body of air in the room is not overheated convection currents are not created. This means that dust is not circulated and drafts are not created. This brings higher levels of comfort, not only to allergy sufferers, but to everyone in the room.

The ECOFILM^{PRO} heating system is completely invisible and unobtrusive and allows more flexibility in creating the perfect living environment. It is reliable, safe and manufactured to last. Being electric with no moving parts it is completely maintenance free.

OPERATING MANUAL

Operation of your ECOFILM^{PRO} 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. See thermostat manufacturers instructions on how to operate the fitted thermostat. There are several points to consider when operating your system to ensure economical operation:

- 1) Following installation of your ECOFILM^{PRO} heating system there are several precautions you should take on initial start - up of the heating system.

Do not be tempted to turn the system on immediately after laying the finished floor. Depending on the floor covering please allow sufficient time for the wood to acclimatise (see manufacturers guidelines). Bring the system up to temperature gradually in stages over the next few days using the floor limit sensor temperature setting.
- 2) Each room installed with an ECOFILM^{PRO} 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.
- 3) Your ECOFILM^{PRO} 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 ensure maximum comfort at minimum cost.
- 4) 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.
- 5) Set the thermostat to your desired comfort level and leave it. Setting the thermostat to a high temperature will not make the room get to temperature quicker. It will merely over heat the occupants once the set temperature is reached.
- 6) The thermostat is fitted with a floor limit sensor. The temperature of the actual floor can be varied to suit different applications and tastes. We recommend a maximum floor temperature setting of 28°C for optimum comfort conditions.

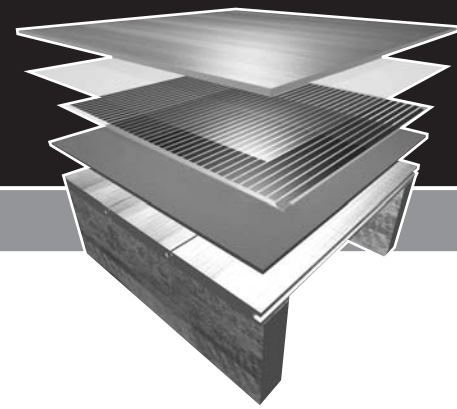
Be Aware

Although your ECOFILM^{PRO} 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.

- 1) Never pierce the floor. Piercing an electrically conductive element with a nail or screw fixing can trigger the RCD unit and cut all power to the system.
- 2) Never cover any heated part of the floor with walls or solid or permanent floor fixed furniture. This could trap heat and potentially cause local overheating.
- 3) Thick rugs, dog beds, bean bags, exercise mats and items with high thermal insulation qualities 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 that a radiant heating system is installed if they are working in the area of an installed ECOFILM^{PRO} heating system. They should read the information contained within the installation and operating manual before commencing work. Failure to comply with information may result in risk of electric shock.



ECOFILM^{PRO} - The complete electric underfloor

heating solution for all wood and laminate floors

Installation is straight forward. However if you require assistance

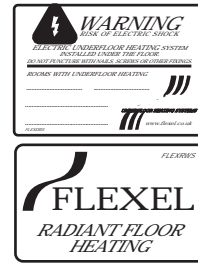
call our dedicated technical team now on 01592 760928



ECOFILM^{PRO} INSTALLATION PLAN

To ensure the validity of your guarantee and the compliance to the 17th Edition wiring regulations (BS7671:2008) please provide a plan layout of your ECOFILM^{PRO} underfloor heating system. Flexel have provided an example opposite and a tick-box 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, guarantee 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 installer

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

What are the lengths of the ECOFILM elements installed in mm?

Element 1. mm Element 2. mm Element 3. mm Element 4. mm

Element 5. mm Element 6. mm Element 7. mm Element 8. mm

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?

Part 2 - To be completed by the electrician

What is the measured resistance of the installed ECOFILM^{PRO} elements (Ohms)?

Element 1. Ω Element 2. Ω Element 3. Ω Element 4. Ω

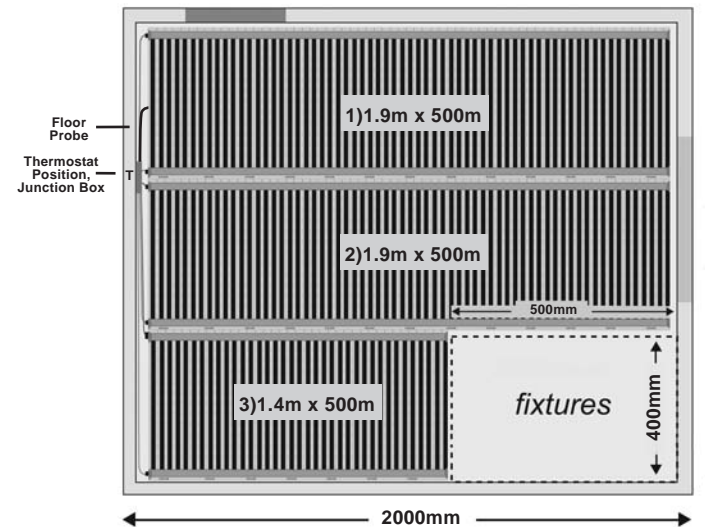
Element 5. Ω Element 6. Ω Element 7. Ω Element 8. Ω

What is the total measured resistance of the installed ECOFILM^{PRO} elements (Ohms)? Ω

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

What is the insulation resistance? MΩ 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 left as a guide.

Take care to show the following:

- Installed lengths
(numbered to correspond to the tables opposite)
- Thermostat position
- Junction box position
- Floor probe position
- Any fixed furniture/fitings
- Room dimensions



10 year
Guarantee

GUARANTEE CERTIFICATE

ECOFILM^{PRO}
professional underfloor heating system

This guarantee is only valid under the following conditions:

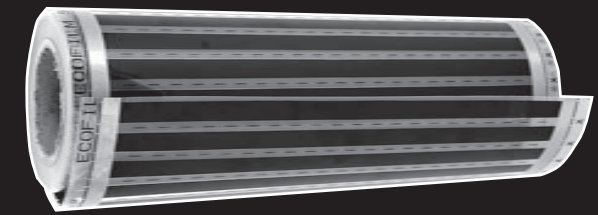
- All electrical connections were carried out by a qualified electrician
- The guarantee covers faults in material for 10 years for **ECOFILM^{PRO}** heating kit and 2 year for other components from the date of purchase.
- The completed guarantee and proof of purchase must be presented in connection with warranty claims.
- The **ECOFILM^{PRO}** Installation plan has been completed by the installer and the electrician.
- The guarantee covers the repair/replacement of goods found to be faulty and does not cover secondary charges relating to the repair/replacement of any floor covering.
- The Flexel warranty does not cover faults resulting from incorrect design or installation or damage caused by others.

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

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

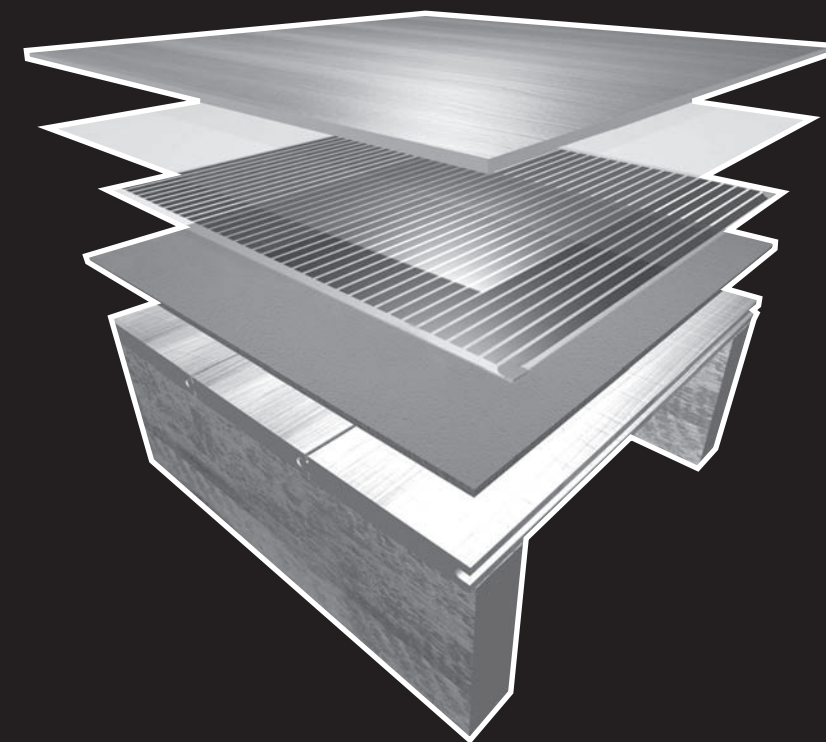
Electrician's Details			
Name		Signature	
Address			
	Postcode		
Contact Tel.	Email Address		
Professional body enrolment number			

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.



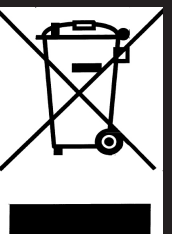
ECOFILM^{PRO}
professional underfloor heating system

ECOFILM^{PRO} KITS MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN



The professional electric underfloor
solution for all wood and laminate floors

heating



Important

This manual must be fully read and understood before installing your underfloor heating system. Incorrect installation or failure to complete the guarantee slip and ECOFILM^{PRO} installation plan will invalidate the Flexel 10 year guarantee.

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