

Plan Your Installation

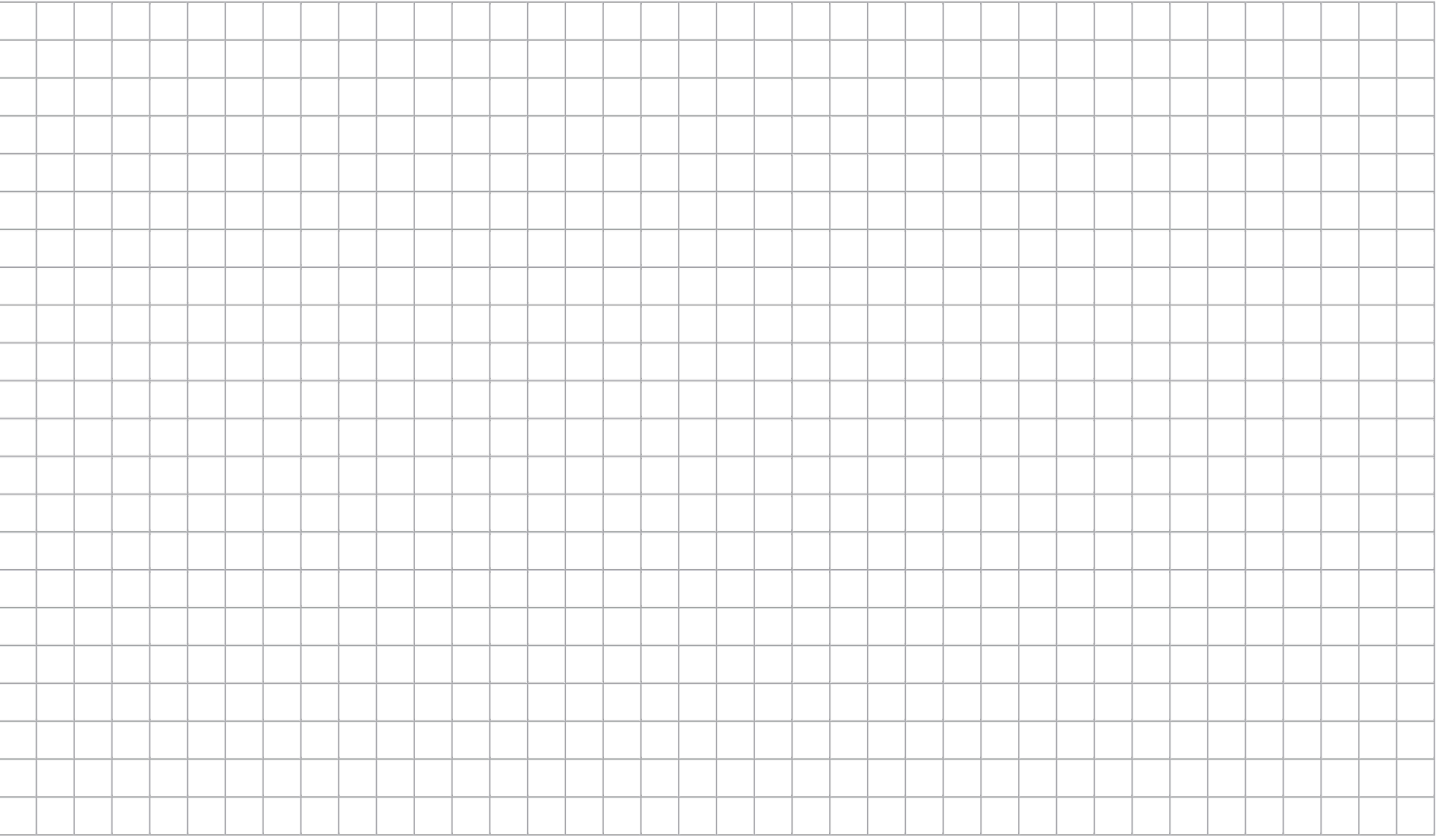
The position of the thermostat should take account of the ease of access to the power supply.

Remember to note down the dimensions of any items of furniture which cover-up the floor surface, such as wardrobes, cupboards, kitchen base units etc. as heating element should not be placed under these. Allow for a perimeter border around the room of at least 50mm from each wall or item of furniture, to determine the heating area of the room.

Element edges should be butted together, do not overlap the **ECOFILM** elements.

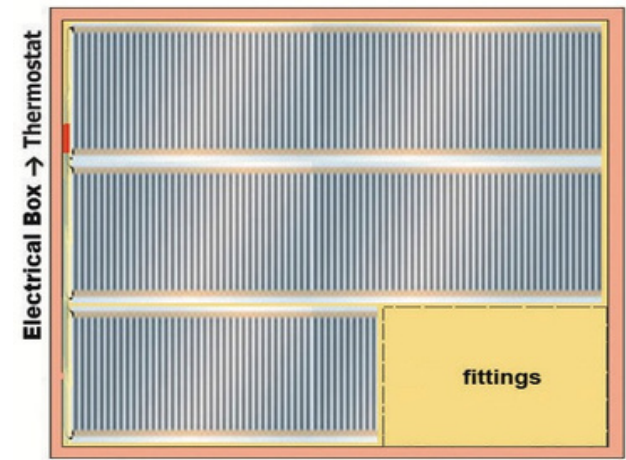
It is recommended that when planning your room the **ECOFILM** elements run in line with the longest room dimension, this keeps elements and electrical connections to a minimum making installation easier and quicker.

FLOOR PLAN



Installation Example

Achildsnurserywithalaminatetfloor to be laid



Product Codes

Product Code	Description	
EPRO - 5	5m² kit	
EPRO - 10	10m² kit	
EPRO - 15	15m² kit	
EPRO - 20	20m² kit	

Required Accessories

Product Code	Description	
EX06-5	ECOMAX-LITE Thermal Insulation (5m² coverage pack)	
ADT50	Heavy Duty Adhesive Tape (50mm x 50m)	
PVB12	Polyester Vapour Barrier (1m x 12m)*	
PVB25	Polyester Vapour Barrier (1m x 25m)**	
ET16W	White Touch Screen Thermostat (16A)	
FT16WIFI	Flexel Touch Wifi Thermostat	

* 1m x 12m of PVB covers 10m² of floor area

** 1m x 25m of PVB covers 22m² of floor area

Additional Accessories

The accessories included in a standard **ECOFILM^{PRO}** kit are sufficient to install the kit in a single regularly shaped room. If installing a larger sized kit in multiple smaller rooms, additional accessories may be required.

Product Code	Description	
CRIMP10	10 x Connection Crimps	
CTBL10	1.5mm² x 10m Cold Tail Leads (Blue)	
CTBR10	1.5mm² x 10m Cold Tail Leads (Brown)	
MASTIC1	1000mm x 101mm Mastic Tape	
GTD20	20 x Green Termination Discs	

FLEXEL

Authorised Distributor

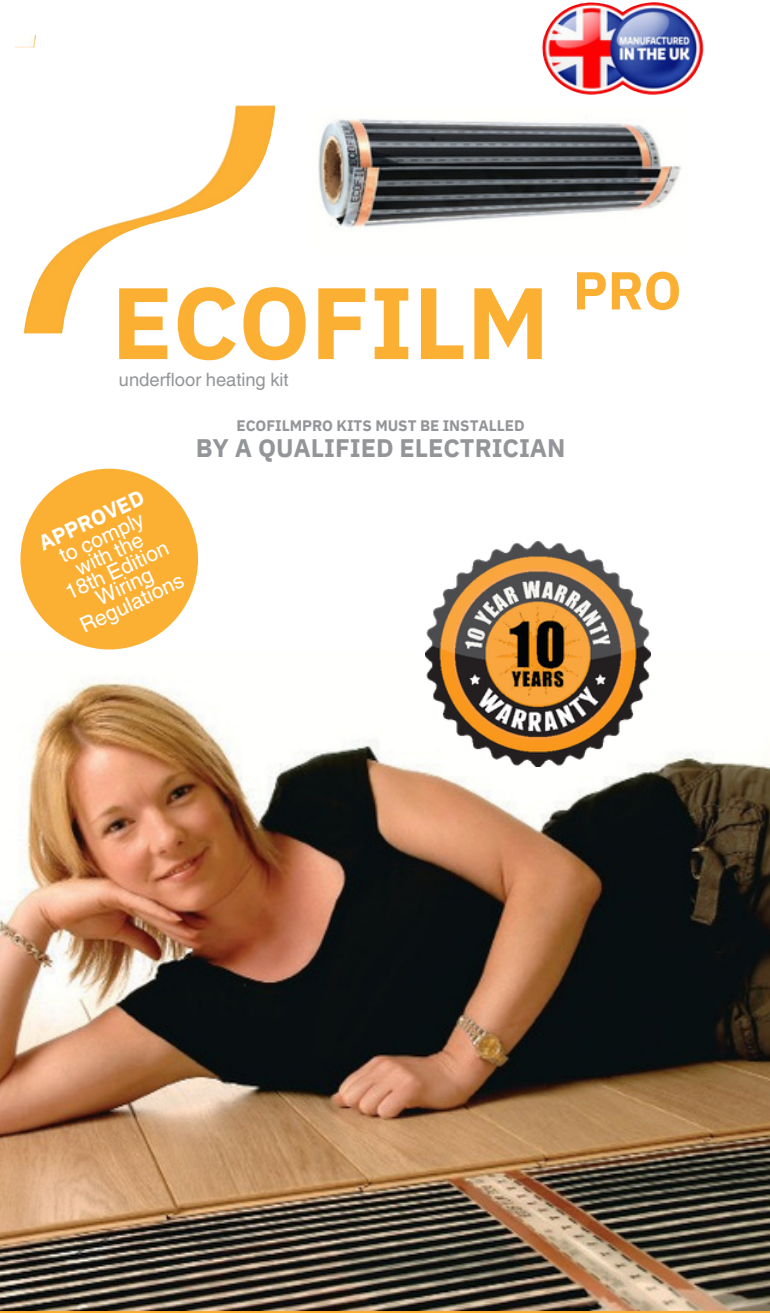
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ECOFILM^{PRO} is part of the Flexel Underfloor Heating Systems product range by Flexel International Ltd, Telford Rd, Glenrothes KY7 4NX, Scotland. Also available: **ECOFLEX**, **ECOFLOOR**, **ECOFILM^{SET}**.

www.flexel.co.uk

Electrical Requirements

- ECOFILM^{PRO} Underfloor Heating Kits are very simple to install by following the comprehensive instruction booklet included. The electrical connections must be made by a qualified electrician in accordance with the current wiring regulations.
- = All installations require a 30mA RCD (residual current device) for safe operation.
- = The maximum load of the thermostat should not be exceeded.
- = All elements require connection to the thermostat via a standard junction box.



The Professional Underfloor Heating Kit For Laminate & Timber Floors

Professional underfloor heating kit for kitchens, living areas and bedrooms

Bringing out the Luxury of a Wood Floor

ECOFILM^{PRO} Professional Underfloor Heating Kits provide the luxury of electric underfloor heating to living rooms, bedrooms, hallways, kitchens or almost anywhere a laminate, engineered wood or real timber floor is being laid.

Easy to lay

ECOFILM^{PRO} Professional Underfloor Heating Kits are available in kit sizes to cover floor areas 5m², 10m², 15m² and 20m² and include all the tools for the professional installer. Simply cut the roll of 500mm wide ECOFILM element to the required lengths and connect the wiring.

Freedom of Installation

ECOFILM elements are ultra-thin and have a minimum effect on finished floor levels. It can be laid on most subfloors, concrete or timber, when used in conjunction with **ECOMAX-LITE** thermal insulation.

Safety

ECOFILM is approved to the relevant International safety approval EN60335-2-96 as required by the 18th Edition Wiring Regulations (BS7671:2008).

Maintenance free

ECOFILM is reliable, safe and manufactured to last. Being electric with no moving parts it is completely maintenance free.



Lay the ECOMAX-LITE Thermal Insulation (available separately) in a "brick work" pattern and fix with adhesive tape.

Economy^{PRO}

ECOFILM produces the optimum heat distribution in any room by using the whole area of the floor to radiate heat. This means that the air temperature can be lowered by 2-3 degrees over a conventional convector system while still maintaining a comfortable environment. **ECOFILM^{PRO}** can realise savings of up to 10% over conventional convector systems if the floor is well insulated.

Lifetime Warranty

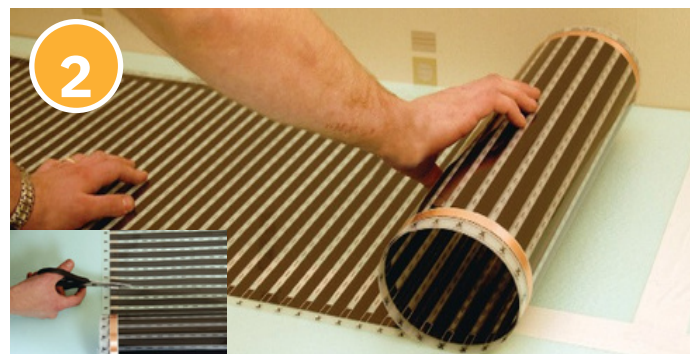
ECOFILM^{PRO} comes with a 10 year warranty against manufacturing defects.

How Effective is under Laminate Heating?

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

A Primary Heat Source

Heat loss calculations should be performed before using **ECOFILM^{PRO}** as the sole source of heating. Consult your Architect or heating engineer. As a guide however if your room complies with the insulation standards in current building regulations, **ECOFILM^{PRO}** can be used as a primary heating source. Rooms with potentially high heat losses may need a supplementary heat source in cold days.



Unroll the ECOFILM^{PRO} and cut to required lengths. Cover the floor area with elements laid in parallel. Elements should NEVER overlap.

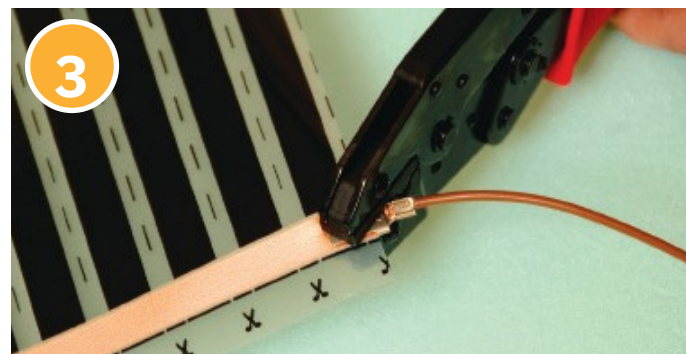
Running Costs

The running costs associated with **ECOFILM^{PRO}** can be related directly to the floor heat-up times. A well insulated sub-floor will significantly reduce heat losses, improve heat-up times & reduce running costs. Even on insulated floors (concrete or wood) a minimum of 6mm of **ECOMAX-LITE** thermal insulation should be used in conjunction with **ECOFILM^{PRO}**.

Simple Control



ECOFILM^{PRO} is controlled by a simple to use thermostat with an intuitive touchscreen interface making adjustment easy. It is packed with innovative features to optimise your comfort and minimise running costs. Available in 3 colour options to blend with your decor and also comes in Wifi version for remote access and control via a smartphone.



Connect the wiring harness to the heating element with the supplied crimping tool and insulate the connector with mastic insulating tape.

Installation

Before laying the **ECOFILM^{PRO}** kit on either a suspended wooden floor or concrete sub-floor it is necessary to install a layer of **ECOMAX-LITE** Thermal Insulation. This will minimise heat losses and ensure quicker heat-up times for the floor. It will also act as a means of sound deadening which is required for laminate floors. Unroll the **ECOFILM^{PRO}** and cut to required lengths. Cover the floor area with elements laid in parallel. Elements should NEVER overlap. Connect the wiring harness to the heating element with the supplied crimping tool and insulate the connector with mastic adhesive tape. Cover the total floor including non heated areas with a layer of Polyester Vapour Barrier.

UFH beneath laminate or engineered hardwood floors



1. Laminate/Timber Floor
2. Polyester Vapour Barrier
3. ECOFILM Elements
4. ECOMAX-LITE Insulation
5. Wood/Concrete Sub Floor



Cover the total ECOFILM^{PRO} installation with POLYESTER VAPOUR BARRIER (available separately).

Kit Contents

The kit includes the following items

Roll of 500mm wide ECOFILM (5m², 10m², 15m² or 20m²)

20 x Foil Crimp Connectors

20 x Green Insulation Discs

15m x Cold Tail Connection Leads (Brown & Blue)

1m x Mastic Insulating Tape

1 x FREE Ratchet Crimping Tool

Warning Labels & Full Installation Instructions



Lay the floor covering as soon as possible to prevent damage to the element.