Under Floor Heating

FAQs

We hope you find the answers to the following 'frequently asked questions' useful. For a complete understanding of the product, they should be read in conjunction with the specification and installation data.

BN Thermic offers two under floor heating systems, which one is right for me?

ECK is for use with stone or ceramic floors. Being a cable based system it is ideal for use in irregular shaped areas

EHM is also for use with stone or ceramic floors, but being a mat-based system is quicker and easier to install. It is particularly suited to regular shaped areas.

Application

Is an EHM underfloor heating system designed to warm a floor or heat a room?

The primary use of an EHM or ECK underfloor heating system is to maintain a comfortable temperature on the surface of a ceramic or stone floor. In performing this function, the system will make a significant contribution to the air temperature within the room. In many instances the system will produce enough warmth to mean that additional heating is not required. As a general rule an EHM or ECK system will be sufficient as a sole source of heat in buildings constructed according to current regulations. In older buildings, supplementary heating may be required.

Can I use EHM outdoors?

Although some electric heating cables can be used to provide a heat source under driveways and ramps, EHM and ECK must only be used indoors.

Selecting a kit

How do I select a kit for my room?

Firstly you must calculate the area of floor to be heated. This will be the total floor area minus the area occupied by fixtures such as cupboards, sinks, baths etc. If you are using an ECK cable kit, select a kit from the ECK schedule of kits ensuring that the minimum 'area to heat' shown is no greater than your calculated area.
For EHM mats, refer to the schedule of EHM mats to find the mat with a square area slightly lower than your calculated figure. This is likely to be the mat for you.
To double-check your selection, draw a sketch of the free area. Leaving a space of 50mm between mat runs and 80mm between the mats and the wall, draw the mat runs onto your sketch. Remember you can cut the mat at any point along its length but you cannot alter its width.
If you are unsure whether there is quite enough space to install a particular EHM mat you should consider using a slightly smaller mat. Remember although you can cut the mat at any point you must not cut the heating cable.

What can I do if my room is too large for a single EHM mat?

It is common practice for two or more EHM mats to be installed in one area. In these circumstances the mats must be connected in parallel. The maximum combined total output of a group of mats controlled by one controller is 3.4kW. If you wish to install more than 3.4kW in one area you will need to use more than one controller.

Installation

Who should install an EHM or ECK system?

EHM and ECK are designed to be installed by a suitably qualified, professional trades-person. They are not 'Do it Yourself' products.

Can I install EHM or ECK on a wooden sub-floor?

Both EHM and ECK can be laid on a wooden sub-floor

Can I install EHM or ECK on an asphalt sub-floor?

No. We do not recommend the installation of EHM or ECK directly onto an asphalt sub-floor.

Can I use EHM or ECK under a floating or suspended floor?

No. EHM or ECK cannot be used in any installation where an air gap exists between the heating cable and the floor surface.

Should I insulate the floor?

Insulation below the heating mat, whilst not essential, will greatly enhance the efficiency and economy of the system. If the mat is to be installed directly on to a layer of insulation, it must be a rigid foil-backed board (foil side up). Under no circumstances should insulation be installed above the heating cable.

What type of tile adhesive can I use?

EHM and ECK have been used successfully with a wide variety of tile adhesives. We suggest the suitability of any given adhesive be confirmed by the adhesive supplier.

How thick should the adhesive layer be?

The layer of adhesive should be thick enough to completely cover the cable.

Can I cut the cold lead?

Yes. The cold lead can be cut or extended to suit the installation.

Can I cut the heating cable?

NO! Under no circumstances should the heating cable be cut. There are three reasons.
1. Cutting the cable will break the electrical circuit that enables the cable to function.

2. Repairs are possible but are difficult to execute and become a potential cause of future failure.
3. If a section of cable is removed and discarded and the circuit reconnected the remaining cable will operate above design temperatures and would be prone to premature failure.

Can I use EHM or ECK with any floor surface?

EHM and ECK have been developed specifically for use with ceramic or stone floor surfaces (including slate and marble). We do not recommend the use of EHM or ECK with floor surfaces such as wood or vinyl.

Can EHM or ECK be used under carpets?

We would not recommend the use of EHM or ECK under a carpeted area.

How long should I wait before energising my EHM or ECK system?

From the date that the surface of the floor has been laid, you should wait 28 days before energising the system. This will ensure that the adhesive is completely dry. NEVER USE THE WARMTH FROM THE CABLE TO DRY THE ADHESIVE.

Operation

How long will EHM or ECK last?

The key to this question is correct installation. Assuming the system is installed in accordance with the instructions and is not subjected to mechanical damage, it will have a life span similar to standard mains carrying electrical cable.

What do I do if my under floor heating stops working?

If the system stops working call a qualified electrician who should make the following checks.

1. Check the supply to the system. The solution maybe as simple as resetting a circuit breaker.
2. Check whether there is an 'error code' on the controller, if there is the controller may need replacing.
3. Disconnect the controller probe from the controller terminal block and using an ohmmeter, check that there is a circuit through the probe. If there is no circuit the probe will need replacing.
4. Disconnect the heating cable from the controller and, using an ohmmeter, check the resistance reading is consistent with the nominal output of the heater. If there is no circuit through the cable, the circuit has been broken and you should check for structural cracking in the floor or for places where screws, bolts or other such fixings have been driven through the floor damaging the cable.

Is my EHM or ECK system guaranteed?

Assuming correct installation, EHM and ECK will give many years of satisfactory service. In the unlikely event of a malfunction resulting from faulty manufacture, EHM and ECK is

guaranteed for 12 months from date of purchase. The guarantee covers the full purchase price but not the cost of repairing or replacing the heater mat in the floor.
An Installation Record Form is supplied with each mat. This should be completed at the time of installation and posted to BN Thermic within 60 days of installation.