



Foil Mat

Electric floor heating mat
for laminate floors.



Installation instructions

Dear relation,

This product has been manufactured with high-quality and durable materials. To guarantee that your product works optimally, there are a few points of attention that are described in these installation instructions. Only when installed according to these instructions can we give you the full guarantee. Please read these instructions, including the middle page, carefully before installation and make sure you use the correct tools and materials. You must have the electrical installation carried out by a recognised installer in accordance with the NEN1010 standards.



Technical data:

Cable type: Double-conductor heating cable with earthing shield.
 Construction: Multi-stranded heating cable with double insulation, earthing shields
 Nominal voltage: 230 Volts
 Nominal capacity: 140W/m²
 Connecting wire: 3 x 1.5 mm² / 5 metres length
 Cable diameter: 3 mm
 Wattage per m1: 10.5 Watt
 Cable standard: IEC800 class II
 Guarantee: 2 years

1. Check:

Before you start, check the contents of the package.

- Heating mat
- Control card
- Flexible sensor tube
- Installation instructions

Thermostat including floor sensor must be purchased separately. It must be set to a maximum temperature of 28 degrees Celsius.

2. Measurement data:

Type	Watt	Size	Amp	Ohm
1 m ²	140 W	0,5x2m	0,6	378
2 m ²	280 W	0,5x4m	1,2	189
3 m ²	420 W	0,5x6m	1,8	126
4 m ²	560 W	0,5x8m	2,4	94
5 m ²	700 W	0,5x10m	3,0	76
6 m ²	840 W	0,5x12m	3,7	63
7 m ²	980 W	0,5x14m	4,3	54
8 m ²	1120 W	0,5x16m	4,9	47
9 m ²	1260 W	0,5x18m	5,5	42
10 m ²	1400 W	0,5x20m	6,1	38

3. Points of attention:

This product is suitable for installation under so-called dry floor coverings (laminated and wood). The floor on which the heating system is to be installed must be sufficiently solid and pressure-resistant.

Check beforehand whether the surface of the heating mat corresponds to the floor area to be heated and whether sufficient current capacity (Amp.) is available.

During processing and other work, be careful of sharp objects that may damage the heating cable.

You should check the mat between and after each work step (See point 7) and fill in the measured values on the middle page. Keep this page in your meter cupboard, it is part of your warranty.

The FoilMat must never be laid on top of each other and must not cross each other.

The connection cable may be extended or shortened, always leaving a minimum of 0.5 metres of connection wire. The heating cable must not be interrupted. The mats must not be laid on top of each other and the heating cables must never cross each other! The warm/cold cable junction lies just inside the heating mat.

The sensor cable may be extended or shortened. The sensor must be mounted in the middle of 2 cables for optimal temperature recording. The sensor (tube) may also not cross heating cables. Make sure that the sensor is mounted at a distance (min. 50 cm) from (hidden) radiator and water pipes, drains and electricity cables. The sensor should always remain in the sensor tube. Cap the end of the tube to prevent the sensor from getting stuck during processing. If the sensor ever needs to be replaced, it can be easily removed.

The FoilMat should never be placed under

fixed objects such as wall units, kitchen units and must be able to give off its heat unhindered. The FoilMat should never be placed under fixed objects such as wall units or kitchen units. In general, a wall clearance of 50 mm should be maintained. The mat may only be processed in the free floor / wall surface.

IMPORTANT: Cover all exposed heating cables (which are visible when the FoilMat is turned over) at the top and bottom with Aluminium tape. This will ensure that the mat's earth jacket remains intact.

The installation of the thermostat should only be carried out by a recognised installer. The power supply must remain disconnected during installation. Connection must be made via an earth leakage switch in accordance with the NEN 1010 installation standards. If several mats are installed in a room, a collective socket can be placed in front of the power point so that only one power cable runs to the thermostat. The maximum connection capacity of the thermostat is 16 Amps. The thermostat must be set to a maximum temperature of 28 degrees Celsius.

4. Required materials:

- An underfloor heating system
- Approx. 2m (flexible) electrical conduit (16 mm)
- Electricity box (min 50 mm deep)
- Power point with earthing
- A multimeter to test the mat between all work steps
- Scissors
- Aluminium tape

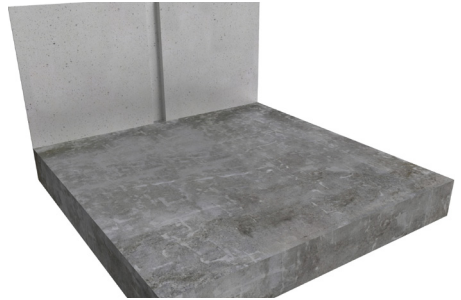
5. Preparations:

Determine the place where the thermostat is to be installed, using a standard flush-mounting box with a minimum depth of 50 mm. Preferably at a height of 1.40 m for ease of use. Cut the necessary slots and install the flush-mounting box, electrical conduit and floor sensor conduit.



6. Substrate:

Make sure the surface on which the mat is to be installed is flat, clean, and free of dust and grease. Always pay attention to the points of attention mentioned in chapter 3.



7. Check resistance values:

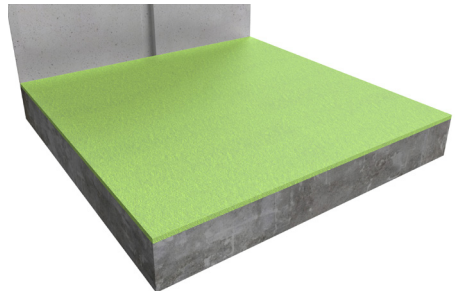
You must check the mat between and after each work step using a multimeter and fill in the measured values on the back page. Measure between the resistance wires and use the table shown in point 2. The Ohmic value may deviate max. 10%. Also measure between the resistance wire and the ground sleeve. The meter must not turn off during this measurement.

Keep the completed card in your meter cupboard. It is part of your guarantee.



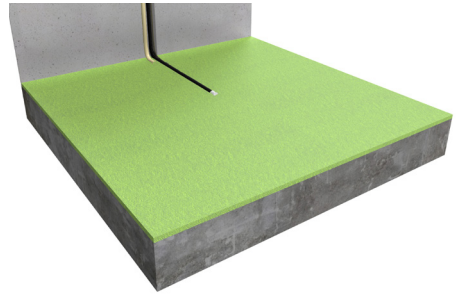
8. Apply PS insulation:

First place PS floor insulation of 6 mm thickness. This must cover the entire floor area! Tape the sheets down to prevent the insulation from moving. Make sure the floor is clean and that no sharp objects can come into contact with or fall onto the heating mat during installation.



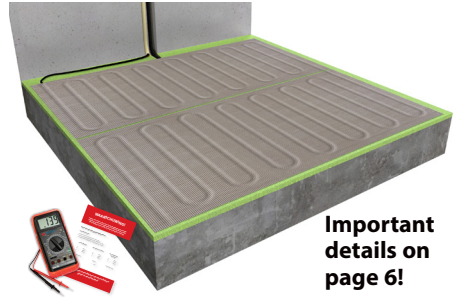
9. Sensor placement:

Cut a trench out of the PS insulation for the floor sensor tube, place the sensor tube incl. floor sensor and tape it down. When placing the FoilMat, make sure that the sensor is exactly between 2 cable loops. CAUTION: Never place the sensor near a (concealed) radiator pipe and never mount it crosswise under a heating cable!



10. Fitting the mat:

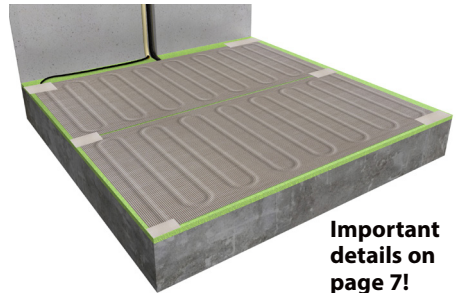
(Important details on page 6) When rolling out the mat, bear in mind a wall distance of 50 mm. If the mat is not at the required length, it can be folded back e.g. by cutting the mat without damaging the heating cable. This can be repeated several times. Once the mat has been laid, test it again using the multimeter.



Important details on page 6!

11. Finishing:

IMPORTANT: Cover all exposed heating cables (which are visible when the FoilMat is turned over) at the top and bottom with Aluminium tape. This leaves the mat's protective earth intact. You can then use the same tape to fix the FoilMat to the subfloor. Then lay the laminate or wooden floorboards according to the manufacturer's instructions and finish. Details on page 7.



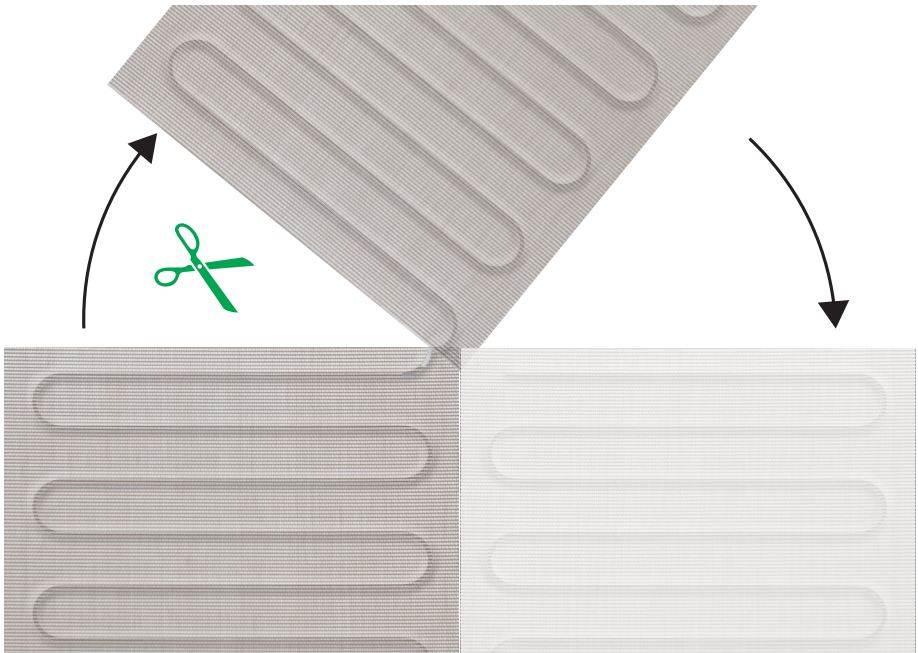
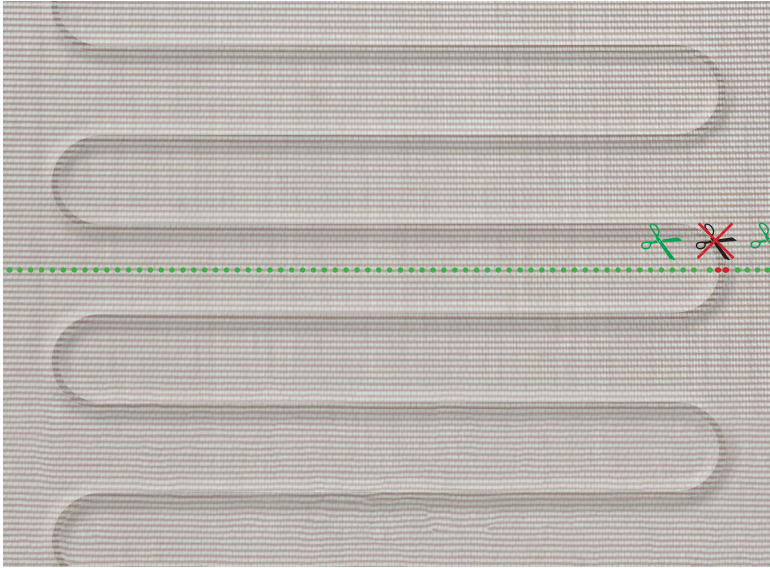
Important details on page 7!

12. Connecting thermostat:

Connection must be carried out by a suitably qualified heating engineer in accordance with local regulations. Before installing the controller, always switch off the electricity in the meter cupboard. For installation, operation and programming of the thermostat, please refer to the instructions enclosed with the thermostat.

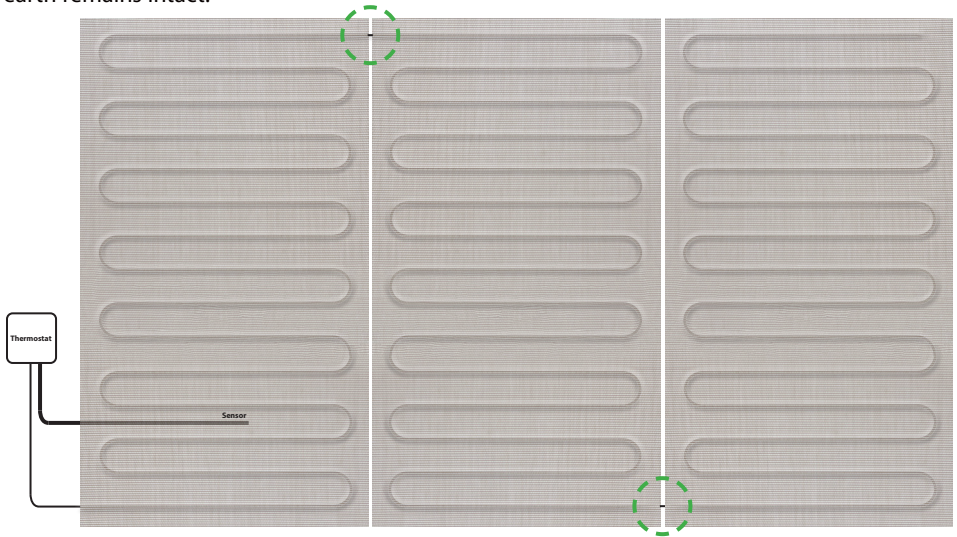


10. Fitting the mat:



11. Finishing:

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WARNING!

**A 230V UNDERFLOOR HEATING SYSTEM IS INSTALLED UNDER THE FLOOR!
NEVER DRILL OR SCREW INTO THE FLOOR! SEE DRAWING/PHOTO FOR THE
POSITION OF THE SYSTEM.**

Underfloor heating installed in:

Control measurements:

A: Between both resistance wires (10% margin)

B: Between resistance wire #1 and ground (This must be "0")

C: Between resistance wire #2 and ground (This must be "0")

Out of packing:

After fitting on the floor:

After installing laminate:

A:.....Ohm

A:.....Ohm

A:.....Ohm

B:.....Ohm

B:.....Ohm

B:.....Ohm

C:.....Ohm

C:.....Ohm

C:.....Ohm

Installer:

Date:

Signature:

.....

...../...../20.....

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**Keep this control card in a visible place in the
meter cupboard!**