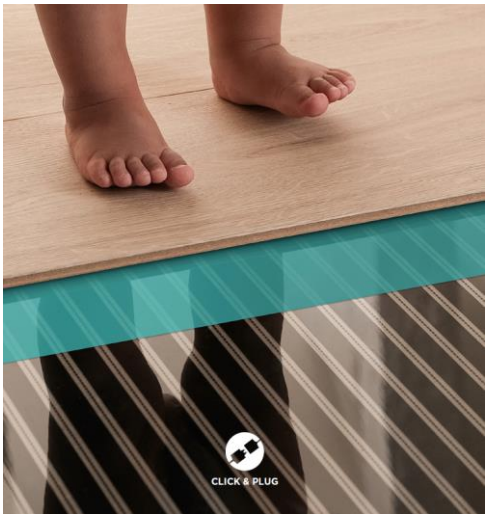
Underlay Heating System

Description:

- Perfect system to be used for additional heating and to provide comfort
- DIY kit – No need for an electrician
- Easy to install with a plug-and-play system
- System components: Heating foils, connector cables, thermostat, insulation plates, installation manual



Characteristics:

Thermostat	Technical Data
Power Supply	240 VAC (50-60Hz)
Sensors	Floor sensor, room sensor
Safety	Built-in Residual current device (15 mA), Child Lock
Size (cm)	Size (cm) L = 12, W = 10 , H = 3,5
Device operation	Multi-room controlling via app, three programs (constant, day/night, weekly)
Floor Temperature control range	5°C min tot 35°C max
Ambiant temperature range	0°C – 50°C
Hysteresis	+/- 1°C
Transmission frequency	2,4 GHz
Transmission range	50m
IP-class	IP21
Certification	CE, RoHs
Installation Zone	Dry rooms only

Heating Foil	Technical Data
Voltage	230 VAC
Power	60 W/m²
Current	Max 10 A
Power load	Max 3000 W (230 V)
Max Area (at 60 W/m²)	Max 50 m² per thermostat
Limiet vloertemperatuur	Max 27° C
Certification	CE, RoHs Only dry rooms
Installation Zone	Dry rooms only

Insulation Plates / XPS boards 6mm	Technical Data
Material	XPS (Extruded Polystyrene)
Size	1200 x 500mm
Color	Black
Thickness	7mm
Density	40kg/m³
Weight	0.3kg/m²
CS	300 kPa
R	0.2 m²K/W
Insulation Plate Impact Sound reduction (ISO 140-8 / ISO 717-2)	ΔL_w = 16 dB

Table:

Product Name	Product Code	Length cm	Width cm	Thickness mm	M²
QuickHeat Foil 0.6 x 3m	NEUDLQH60X300	300	60	0,4	1,8m²
QuickHeat Foil 0.6 x 5m	NEUDLQH60X500	500	60	0,4	3m²
QuickHeat Foil 0.6 x 7m	NEUDLQH60X700	700	60	0,4	4,2m²
QuickHeat Foil 1 x 3m	NEUDLQH100X300	300	100	0,4	3m²
QuickHeat Foil 1 x 5m	NEUDLQH100X500	500	100	0,4	5m²
QuickHeat Foil 1 x 7m	NEUDLQH100X700	700	100	0,4	7m²
QuickHeat Foil 1.2 x 3m	NEUDLQH120X300	300	120	0,4	3,6m²
QuickHeat Foil 1.2 x 5m	NEUDLQH120X500	500	120	0,4	6m²
QuickHeat Foil 1.2 x 7m	NEUDLQH120X700	700	120	0,4	8,4m²
QuickHeat Cable 1m	NEQHEXTCAB100	100	/	/	/
QuickHeat Cable 3m	NEQHEXTCAB300	300	/	/	/
QuickHeat Thermostat (Kit)	NEQHKITWIFI	10	12	35	/
QuickHeat Insulation Board	NEUDLQHPLATE	120	50	7	0.6m²

Selection and calculation of materials

Before you install the QuickHeat system, we advise to carefully plan the layout pattern of the installation. Making a sketch of the room where you will position the system will provide a good overview to know which sizes of heating foils to use.
Please be advised that every system consists of heating foils, a thermostat, cables and underlay + vapor barrier (optionally). The maximum area per thermostat is set at 50m², with an output of 3000W.
We suggest to adhere the following criteria: take into account some margin for every measurement, and always take the biggest size to be most cost-efficient.

Example:

If you have measured a room of 6m * 5m you have the following options:

- 5 foils (5m) of 1,2m width
- 6 foils (5m) of 1m width
- 10 foils (5m) of 0.6m width

In this example it is best to choose option number 1, which would be the most cost-efficient.

Calculation of Required Electrical Power

Every fuse in the mains supply distribution board has its protective value imprinted in Ampere (e.g. 10, 13 or 16 A). Multiply this number by the mains voltage (e.g. 230 Volt) to find the available output.
Example: Ampere (I) multiplied by Volt (U) equals Power (P):
I x U = P 13 Amp x 230 V = 2990 Watt

When calculating the output available for the QuickHeat system, you should take all your electrical appliances on this fuse into consideration. If you are in doubt about which fuse covers the particular floor area, you can simply turn it off one by one and see what appliances are not working.
You can typically find the power of your electric appliances imprinted as W on the back of the product.
The 'power' of your fuses minus the total power of your appliances equals the remaining power that is available for your QuickHeat floor heating system.
Calculate the available power for your QuickHeat floor heating system using the following table:

Calculation Example

Fuse in the distribution board (e.g. 16 A x 230 V)	3.680W
EXISTING APPLIANCES IN THE ROOM:	
TV and DVD player	80W
Hi-fi set (radio/CD-player/amplifier)	60W
Total lighting	180W
Aquarium	60W
Subtotals	380W
Total available power for Quickheat	3.300W

Your Calculation

Insert your fuse size from the distribution board (__ A x 230 V)	W
EXISTING APPLIANCES IN THE ROOM:	
TV and DVD	W
Hi-fi set (radio/CD-player/amplifier)	W
Total lighting	W
Other appliances	W
Other appliances	W
Other appliances	W
Subtotal	W
Total available power for Quickheat	W

In the event that you are running short of power (total W) on one fuse, you will need to split the floor heating mats up into two (or more) zones. Connect the second zone to a second Pergo Wireless Kit and to a second available supply fuse.
In the event that you need to cover a room with a heated area exceeding 50 m², you must split the floor heating system into two (or more) zones using multiple thermostats.

Laying instructions

Please see installation manual