



Warm Floor

ELECTRIC
FLOOR HEATING

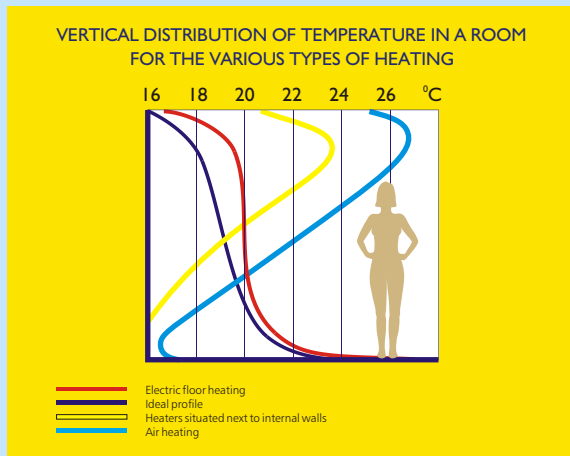


ELEKTRA HEATING MATS

EASY TO ASSEMBLE
COMFORTABLE
SAFE
ECONOMIC
GUARANTEED FOR
10 YEARS



Heating mats can be used as a basic heating system, or can supplement your existing heating arrangements. Heating mats are suitable for a wide range of applications, from rooms throughout your home - bathrooms, kitchens, utility, and conservatories; through to commercial premises - offices, public buildings, etc.



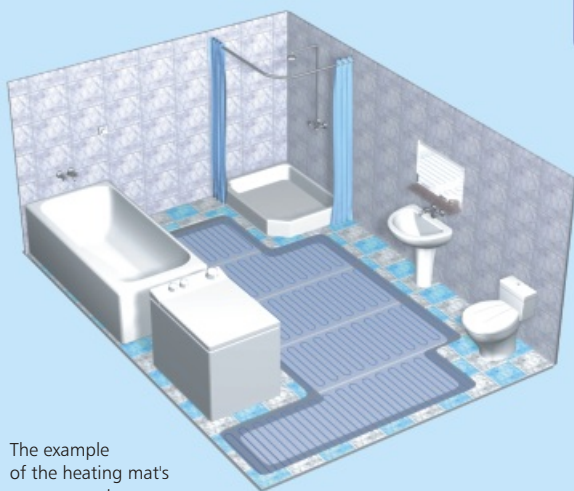
Research has shown that electric floor heating is the most favourable heating system for a human being, as it considers the physiological distribution of temperature.

The very thin nature of the heating mat means it can be used in the adaptation and redecoration of almost any room, with virtually no effect on the floors elevation. The heating mats can also be used in new build construction projects, large and small, and in places where underfloor heating cable cannot be used.

The Elektra heating mat system, can be used below the floor that is to be adapted for underfloor heating. It is suitable for most floor coverings, tiled, wood, laminate, terracotta, stone, even carpeting. It is recommended as a very effective additional heating system, and in floors with good thermal insulation, it can be used as the primary heating for that room. It is the quickest, easiest, and most effective way to reheat rooms, or preferred areas with the minimum fuss.



The assembly of a heating mat is very simple. By following the comprehensive installation instructions enclosed with the heating mat kit, you'll be able to install effective underfloor heating easily.

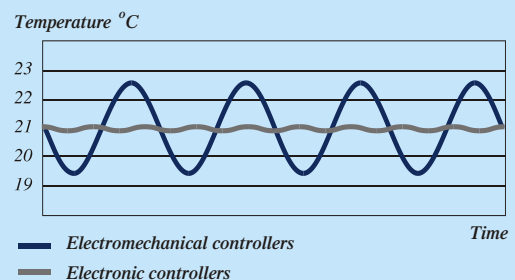


The example of the heating mat's arrangement.

Single side powered mats, due to their construction, are easier to assemble and install. Double-side powered mats are thinner and during their installation it must be remembered to lead both cold tails into the power supply.

With correctly selected controllers you could make energy savings of up to **30%**

Diagram of electromechanical and electronic controllers operation



CONTROLLERS WITH PROGRAMMER

These combine the advantages of electronic controllers, with digital circuit "intelligence", and the ability to programme temperature settings in 24hr and weekly cycles. The LCD offers the opportunity to read data such as: true room temperature, previously programmed comfort and economy temperatures, heating system operating time, programme number and graphic images. Selected models have a function that allows the temperature controller to calculate itself the optimum time to switch off the heating when the desired temperature has been reached at a programmed time. Load up to 3600W.

Four events: waking up, leaving, returning and the night mode. Time and temperature may be programmed individually for each of those events. Such an innovative solution allows for programming even four various temperature levels at different times. A large LCD and graphic symbols make the programming process a child's play. Features an adaptation function. Can be installed in a double frame, for instance with a light switch.



ELEKTRA Microline OCC2

ELECTRONIC CONTROLLERS

These are more commonly used. Their basic advantage is high temperature measurement accuracy (0.3 ÷ 0.1°C). They operate noiselessly, and are equipped with an air sensor, a floor sensor, or an air-floor sensor with floor overheat protection. They can be surface or sunk installed. Load up to 3600W. Working in conjunction with a control timer could mean energy savings of up to 30%.

The Elektra Microline OTN with temperature lowering can be connected to an external "day/week" timer which can programme temperature time and temperature lowering. By means of the rings hidden under a knob it is possible to limit mechanically the knob rotation range i.e. a minimum and maximum temperature setting. The OTN thermostat is delivered as a set with floor sensor or built in air sensor. It is possible to install a separate air sensor.



ELEKTRA Microline OTN

TECHNICAL DATA

HEATING MATS

ELEKTRA MG - double-side power supply

TYPE	DIMENSIONS	SURFACE	POWER
-	m x m	m ²	W
100 W/m²			
MG100/1,0	0,5 x 2,0	1,00	100
MG100/1,5	0,5 x 3,0	1,50	150
MG100/2,0	0,5 x 4,0	2,00	200
MG100/2,5	0,5 x 5,0	2,50	250
MG100/3,0	0,5 x 6,0	3,00	300
MG100/3,5	0,5 x 7,0	3,50	350
MG100/4,5	0,5 x 9,0	4,50	450
MG100/5,0	0,5 x 10,0	5,00	500
MG100/6,0	0,5 x 12,0	6,00	600
MG100/8,0	0,5 x 16,0	8,00	800
MG100/9,0	0,5 x 18,0	9,00	900
MG100/10,0	0,5 x 20,0	10,00	1000
MG100/12,0	0,5 x 24,0	12,00	1200
160 W/m²			
MG160/1,0	0,5 x 2,0	1,00	160
MG160/1,5	0,5 x 3,0	1,50	240
MG160/2,0	0,5 x 4,0	2,00	320
MG160/2,5	0,5 x 5,0	2,50	400
MG160/3,0	0,5 x 6,0	3,00	480
MG160/3,5	0,5 x 7,0	3,50	560
MG160/4,0	0,5 x 8,0	4,00	640
MG160/5,0	0,5 x 10,0	5,00	800
MG160/6,0	0,5 x 12,0	6,00	960
MG160/7,0	0,5 x 14,0	7,00	1120
MG160/8,0	0,5 x 16,0	8,00	1280
MG160/9,0	0,5 x 18,0	9,00	1440
MG160/10,0	0,5 x 20,0	10,00	1600

ELEKTRA MD - single-side power supply

TYPE	DIMENSIONS	SURFACE	POWER
-	m x m	m ²	W
100 W/m²			
MD100/1,0	0,5 x 2,0	1,00	100
MD100/1,5	0,5 x 3,0	1,50	150
MD100/2,0	0,5 x 4,0	2,00	200
MD100/2,5	0,5 x 5,0	2,50	250
MD100/3,0	0,5 x 6,0	3,00	300
MD100/3,5	0,5 x 7,0	3,50	350
MD100/4,0	0,5 x 8,0	4,00	400
MD100/4,5	0,5 x 9,0	4,50	450
MD100/5,0	0,5 x 10,0	5,00	500
MD100/6,0	0,5 x 12,0	6,00	600
MD100/8,0	0,5 x 16,0	8,00	800
MD100/10,0	0,5 x 20,0	10,00	1000
160 W/m²			
MD160/1,0	0,5 x 2,0	1,00	160
MD160/1,5	0,5 x 3,0	1,50	240
MD160/2,0	0,5 x 4,0	2,00	320
MD160/2,5	0,5 x 5,0	2,50	400
MD160/3,0	0,5 x 6,0	3,00	480
MD160/3,5	0,5 x 7,0	3,50	560
MD160/4,0	0,5 x 8,0	4,00	640
MD160/4,5	0,5 x 9,0	4,50	720
MD160/5,0	0,5 x 10,0	5,00	800
MD160/6,0	0,5 x 12,0	6,00	960
MD160/7,0	0,5 x 14,0	7,00	1120
MD160/8,0	0,5 x 16,0	8,00	1280

CONTROLLERS

TYPE	ELEKTRA Microline OTN 1991	ELEKTRA Microline OTN 1999	ELEKTRA Microline OCC2 1991	ELEKTRA Microline OCC2 1999
floor sensor	•		•	
air sensor		•		•
installation	sunk	sunk	sunk	sunk
supply (V)	220/230	220/230	220/230	220/230
control range (°C)	from +5 to +40	from +5 to +40	from +5 to +40	from +5 to +40
temperature lowering (°C)	by 5	by 5	from +5 to +40	from +5 to +40
max. load (W)	3600	3600	3600	3600
switch	1 pole	1 pole	1 pole	1 pole
protection degree (IP)	20	20	21	21
dimensions: height x width x depth (mm)	80 x 80 x 50	80 x 80 x 50	80 x 80 x 48	80 x 80 x 48

ELEKTRA

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