

Loose Cable

Product/Length (Metres)	Output	Resistance (Ohms)	Area Covered (Square Metres)
A150	150w/0.7amps	353	0.75-1.25
B300	300w/1.3amps	176	1.5-2.5
C450	450w/2.0amps	118	2.25-3.75
D600	600w/2.6amps	88	3.0-5.0
E750	750w/3.3amps	71	3.75-6.25
F900	900w/4.0amps	59	4.5-7.5

Loose Cable Installation

Use loose cable where the floor area to be heated is an awkward shape and not easily accommodated by a heating mat. The floor and electrical preparation is similar to that for mat installation, the only difference is that the heating cable needs to be fixed down along its entire length. Always remember that it is important to achieve consistent cable spacing for an even heat over the floor surface and to avoid hot and cold spots. Under no circumstances should any cable be closer than 50mm to its neighbour to avoid long term overheating and deterioration.

Planning the installation

To calculate the free area available for heating, simply allow for a 100mm (0.1 metre) margin around the full perimeter of your room and any fixed objects and deduct the sum of this from the total area. You should then choose a cable size or a combination of cable sizes that is equal to or less than this figure. (Remember that heating cables can not be shortened). The cable should not be laid over or close to any existing hot water service or central heating pipes and bear in mind that the heating cable should be laid approximately 80mm apart or as the following spacing chart. Remember that areas under fixed objects, such as baths, toilets, shower trays, kitchen units, cookers etc. are not normally heated and thought should be given to the final fixing of kitchen units and sanitary ware etc., to avoid damaging the heating element.

Planning and laying the heating cable

Following on from the floor preparation for installing mats, once the primed floor is completely dry, you can plan and mark out the layout of the heater cable. Having already calculated the floor area and chosen the cable size, use the following table to work out your cable spacing.

Cable spacing and heater output

Adjusting the space between the cable runs will vary the output of the heating cable per square metre. For example spacings of 100mm give an output of 120 w/sqm, 75mm gives 150 w/sq.m and 55mm gives 200 w/sq.m. Note these are the preferred outputs and spacings, but on no account should the cable be laid with spacings less than 50mm which can cause overheating and deterioration of the cable.

For Example: - your heated area* is 5.00 square metres and the product is an E750. From the table the spacing is 75mm to give 150w/sqm. Or if the product is D600, the spacing is 100mm to give 120w/sqm* (The heated area is the total floor area minus fixed objects and 100mm-perimeter strip). Note: - the dimensions shown in the chart are approximate and may change slightly due to the configuration of the room and the way that the cable is laid. Any surplus cable can be run around the perimeter of the room.

	Spacing (mm)	100	95	90	85	80	75	70	65	60	55
Product Output (Watts)	Cable Length (Metres)	Area Covered (Square Metres)									
A150 - 150w	13	1.25	1.20	1.15	1.10	1.05	1.00	0.93	0.87	0.81	0.75
B300 - 300w	26	2.50	2.40	2.30	2.20	2.10	2.00	1.88	1.75	1.63	1.50
C450 - 450w	41	3.75	3.60	3.45	3.30	3.15	3.00	2.94	2.75	2.44	2.25
D600 - 600w	54	5.00	4.80	4.60	4.40	4.20	4.00	3.75	3.50	3.25	3.00
E750 - 750w	68	6.25	6.00	5.75	5.50	5.25	5.00	4.69	4.38	4.06	3.75
F900 - 900w	83	7.50	7.20	6.90	6.60	6.30	6.00	5.63	5.25	4.88	4.50
	Watts/sqm	120	126	132	138	144	150	163	175	188	200

Marking the layout

Having decided on the required spacing, using a marker pen, mark a perimeter line 150mm in from the edge of the room and any fixed objects. Then starting at the closest corner of the room, adjacent to the timerstat, (the starting point), mark out the spacing intervals for the heater cable. Endeavour to keep all spacing as uniform as possible.

Laying the heating cable

Once you have completed marking the floor, the heating cable can now be laid out. Gently unwind the power supply cable from the cable reel until the joint with the heating cable is reached, this should then be taped to the floor at the start point using the adhesive tape supplied. At this point it is a good idea to check the electrical resistance of the cable, so as to ensure that there is a circuit,

In the unlikely event that there is a fault. The reading should be approximately similar to that on the ratings label on the reel, or as shown in the chart. Now lay the cable in parallel lines, back and forth across the floor area, following the spacing marks and fixing it lightly at intervals with short pieces of adhesive tape. Continue to the end of the cable and adjust cable if necessary. Any excess cable can be run along the centre of the perimeter space ensuring that equal spacing is maintained between cable runs. Ensure that the heating cables are never allowed to

touch or cross, are not twisted, knotted, kinked or coiled and are not shortened or modified in any way. Also the heating cable should not be laid up stairways or wall areas. Please contact the technical help line if you need assistance. When the layout has been completed and any adjustments made, the entire length of cable should now be taped to the floor to provide protection during tiling. Ensure that it is straight and in full contact with the floor and by running your thumb and forefinger along the tape either side of the cable, remove any air gaps. Now remove any debris and unless the floor is to be tiled immediately, it should be covered to protect the heating cable.

Installing the timerstat and floor probe

The floor probe is packaged with the timerstat. The timerstat will not work with a probe from a different model. The floor probe has a 4m lead attached, that can be shortened or lengthened with suitable wire. Tape the probe end down to the floor midway between 2 heating wires and run the cable up to the timerstat back-box.

Test the heaters

Before completing the electrical installation, it is advisable to check that the heater is working correctly. This can be done by temporarily wiring the heater cable to a 3-pin plug as per the installation for mat installation.