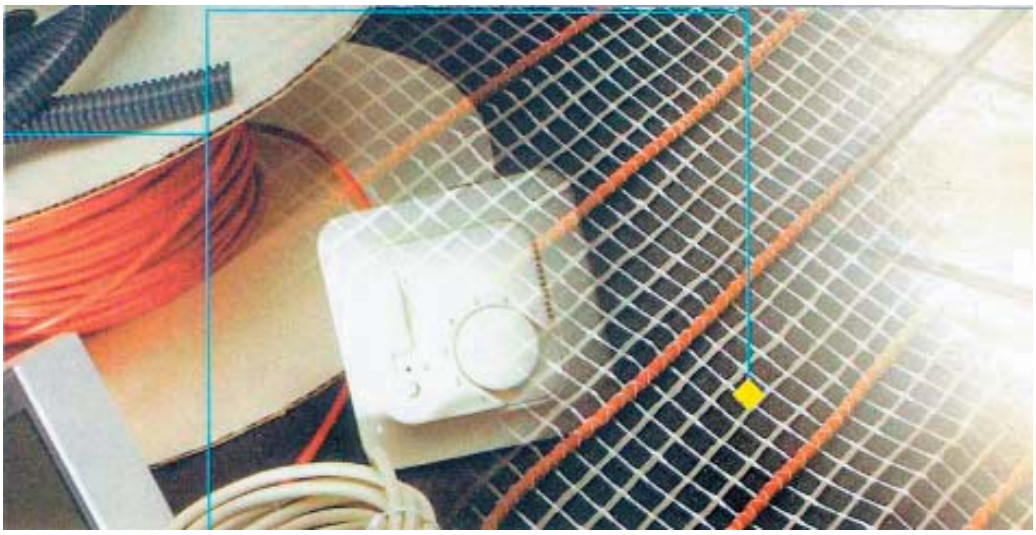
UNDERFLOOR HEATING

mat system

Ideal for tiled floors in bathrooms, kitchens, porches or conservatories. For timber laminate floors a separate system is available.



Running costs of £8-10 per square metre per annum dependent on insulation levels, or £12 per square metre in a conservatory. Digital thermostat included. Cable is sheathed for electrical earth bonding. Suitable for use beneath a shower in a wetroom.

Twin conductor heating elements give very low electromagnetic fields and require connection at one end only. 500mm wide mats offer approximately 150 watts per square metre. Suitable for for timber and concrete sub floors and usually installed beneath tiling. It can also be covered with a thin screed or used below vinyl (with latex screed over).

Maximum performance is achieved with a high level of floor insulation to prevent heat migating downwards. Marmox insulated backer board is available in thicknesses of 6 - 60mm to improve warm-up times and reduce heat loss.

The digital thermostat has a 7-day, 24 hour timer with up to four on/off settings per day.

Cable kit includes: sheathed cable in mat 500mm wide, floor probe sensor, digital thermostat, lifetime written warranty and instructions.

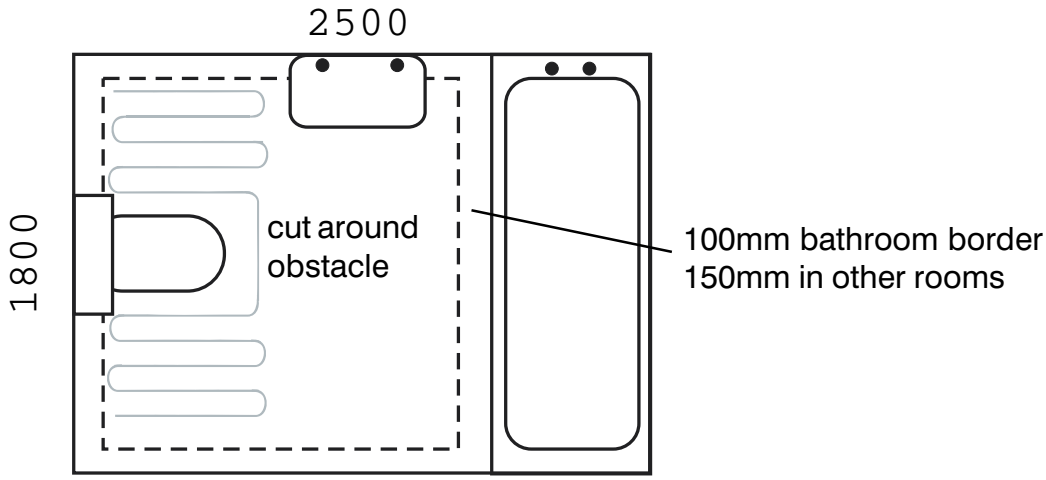
FAQ's

WETROOM INNOVATIONS

- **What sized kit should I order for a bathroom?**
  A typical British bathroom is 2.5 mt x 1.8 mt (see drawing). Allow a clear 100mm border on visible floor area (i.e. excluding bath).

Room size 2.5 x 1.8 m	=	4.5	m^2
DEDUCT 100 perimeter strip		0.76	m^2
sanitary ware		1.5	m^2
AREA	=	2.24	m^2 ∴ order TPSM 300 ($2m^2$ kit)

  Note: A bath, w.c. and basin occupy $1.5m^2$ of floor area.



- **What sized kit should I order for other rooms?**
  Allow a clear 150mm border around the room and deduct it from the room area. This is the size to order. If you then find there is too much cable, simply cut several sections from the mat and run some long length of cable along the outer borders.

e.g. Room 3m x 3m	=	9.0	m2
150mm x 12 mt wall length	=	1.8	m^2
AREA	=	7.2	m^2 ∴ order TPSM 1050 ($7m^2$ kit)

- **Will floor level be raised?**
  Yes, the cable is 3mm and overall mat thickness is 4mm. On tiled floors also add on 3–4mm for tile adhesive plus tile thickness.

- **Will the heat cause tile-cracking from movement of the substrate?**
  Tile-cracking can occur on concrete as well as timber. It is important to de-couple the tiling from the substrate. To do this apply either Insulated Tile Backer Board or MAXO membrane. Both are available from stock.

- **What electrical connection is needed?**
  A fused spur from the ring main or use the lighting or extractor fan circuit. The thermostat is placed on a wall low down or high. In a bathroom or wetroom place it outside the room.

- **What kind of adhesive is used?**
  The mat is self-adhesive. An aerosol as used by carpet fitters is also suitable. A latex self-levelling screed is ideal to cover the cable giving a smooth top surface. On timber (prime first) or tile backer board use flexible tile adhesive. Do not use heating for 14 days: drying must occur naturally.

- **What is the warm-up time from cold?**

On tile backer board (insulated)	15–25 minutes
On timber (no tbb)	30–55 minutes
On uninsulated concrete	2–5 hours
On insulated concrete	2–3 hours

- **Any fitting tips?**
  Apply the flexible tile adhesive with a rubber-backed trowel parallel to the cables (ie not dragging adhesive across cables): this will minimise damage. Avoid walking on cables - cover with strips of cardboard, mdf or chipboard. Test the system before tiling.