

Elektra DM20 Heating Cable In-Screed Installations

When cables are to be screeded they are generally laid over existing concrete or timber with a moisture barrier (Masonite or cement sheeting) in an existing room.

Regardless of the installation method, take the time to either draw out a plan, or at the very least, check spacings within the heated area beforehand. This will allow you to space runs as evenly as possible. **For tiled floors, cables should be covered with a minimum depth 6 -8 mm of self levelling compound eg: Ardex™. For carpeted floors, cables should be covered with a minimum depth of 15mm of self levelling compound.**

Before starting the layout, give consideration to the location of the cold tail. This should be positioned near to a wall, at a suitable thermostat location.

- 1.** All installations must be carried out by a qualified electrician to comply with Australian Standards and local wiring regulations.
Cable must be kept a minimum of 75 mm away from walls, cupboards, toilets and any fixtures in the heated area (see diagram next page).
Cables are spaced at 100 -120mm apart to give optimum results. They should be no closer than 75 mm and at a maximum of 130 mm apart.
There are two common methods for fixing to the floor.

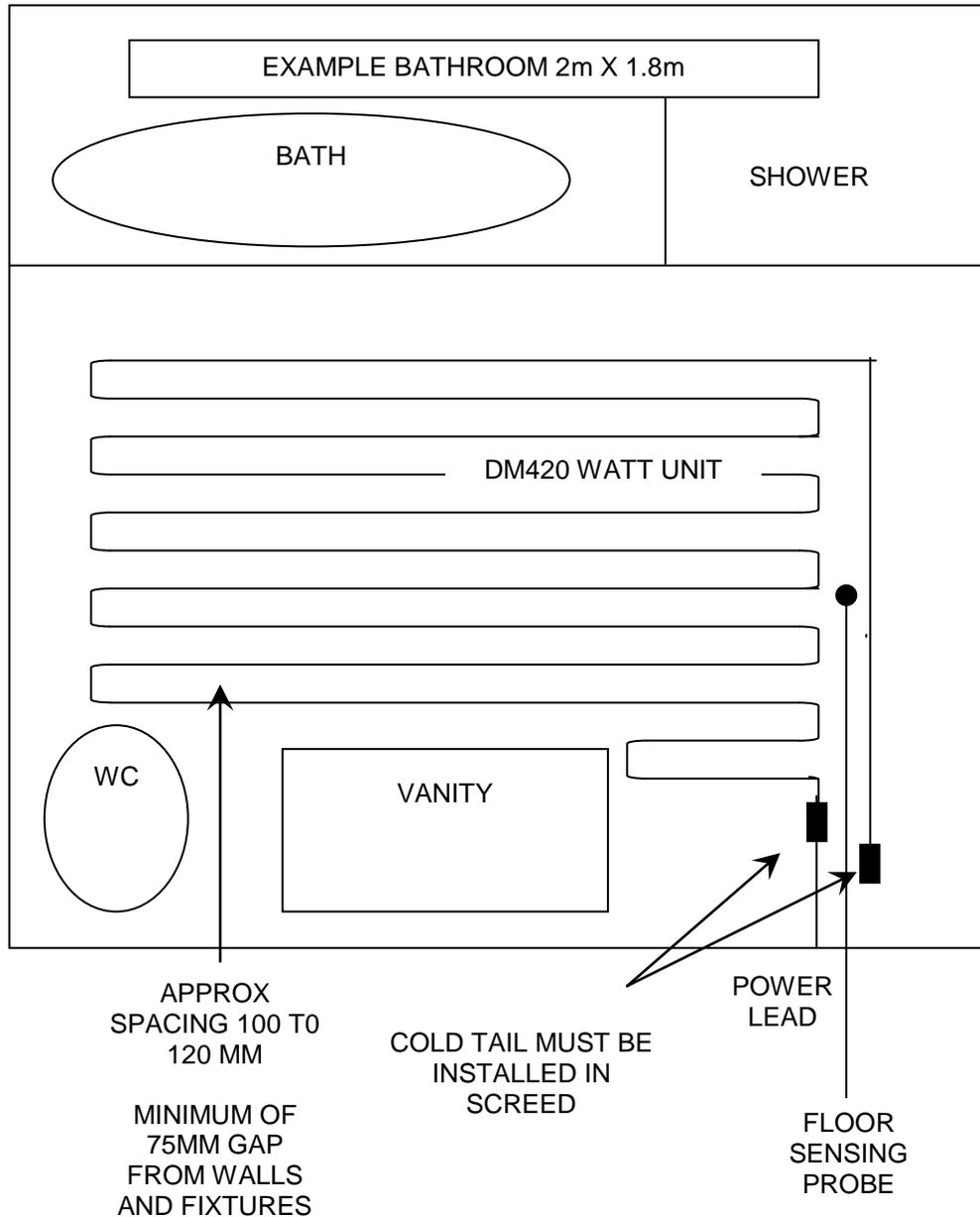
A) “Wire-Mesh” method includes pre-laying of wire netting in the heated area and fixing of heating cable with small PVC cable ties. This method is usually used where the floor is uneven and requires a sand and cement screed.

B) “Gaffer-Tape” method the floor must be thoroughly clean and an even surface. This method can be used with both sand and cement or a self-levelling compound. Apply a bonding agent to the floor where necessary and allow to dry. Tape the cable directly to the floor in the heated area at recommended spacings.

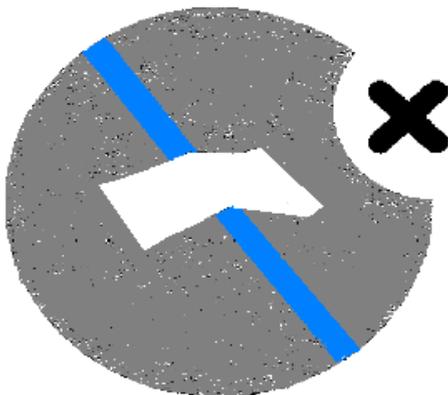
Note: Take care not to bridge tape over cable. It should surround the outer surfaces with no air gaps (see diagram).
- 2.** The screed must cover all of the heating cable and cold tails.
- 3.** Ensure that floor probe (with programmable thermostat) is in place before screed is laid.
- 4.** To avoid damage, cables must not be left lying unprotected and screed should be applied immediately after laying of the heating cable.
- 5.** Do not switch on the in-floor heating for several weeks to allow floor to dry and harden naturally.
- 6.** It will not often be practical to attend the job throughout covering as this may be done as the floor tiler proceeds. Check the heating cable at regular intervals.

Example of In-Screed Heating for a Typical Bathroom Floor

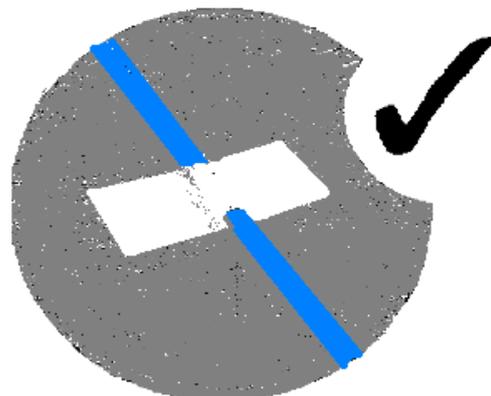
ACTUAL HEATED
FLOOR AREA
APPROX. 2.2m²
eg: DM420 21mt



Tape should not 'bridge' the cable. It should encase the cable as much as possible. This may be facilitated by sticking the tape to the floor up to the point where you have positioned the first cable run, holding the roll of tape whilst gently rolling the cable towards the sticky underside and back into position so that the tape is wrapped around the cable. Continue sticking the tape to the floor up to the next cable run and repeat



Tape should not bridge cable



Tape should encase cable