

Installation Instructions for Inscreeed Heating Cable in large areas.



Before you begin installing please read through these instructions carefully.

Installation notes:

- This cable is an inscreeed cable, designed to be installed in a sand and cement bed of approx. 20 – 40 mm, tied to a light gauge mesh of 50 or 100 mm squares.
- The system requires a mains voltage of 230/240v and 30ma RCD. The final connections **MUST** be done by a licensed electrician.
- The system is designed for heating tiled areas with an optimum recommended output between 120-150 watts per square metre, achieved by spacing the cable at 100 – 150 mm between loops.
- The cable is a double insulated twin core cable with an earth shield, which **MUST** be connected to the earth supply.
- The cable **MUST** not be cut or cross anywhere.
- This cable has a rating of IPX7 so is safe for all wet areas

Electrical Requirements:

- Some preparation will be needed before the walls are cladded such as- two 20mm conduits, with a draw wire in both, running from the thermostat position and bent out at the top of the floor for the cables to be drawn through and connected to the thermostat.
- The thermostat is vertically mounted and will fit into a standard stud bracket or plaster bracket which must also be installed before wall cladding.



- The Thermostat has a rating of 15 amps, for a larger area a contactor will be needed.
- For bathrooms and wet areas careful consideration of the position of the thermostat must be taken due to SAA Wiring Rules and Regulations. Consult a licenced electrician for advice.
- All floor heating must be connected to a 30ma RCD device.
- If 2 cables are needed, cables can be connected in parallel at the thermostat or junction box.
- 2 floor sensing probes are supplied, both must be installed but only one needs to be connected the other is a spare.

Installation:

STEP 1 –

Lay out the mesh over the entire area and mark out fixed objects such as cupboards, benches, island benches, ect.



STEP 2 –

Calculate spacing.

This is a very important step and must be done correctly to ensure all the cable is used and to avoid extra work later. The recommended spacing is 130mm between loops, this will give approx. 150 watts per square meter. No spacing should be less than 100mm or more than 150mm.

Firstly measure the area to be heated in square metres (do not include the area taken up with fixed objects) don't forget your allowance to come off the wall, then divide this area by the length of the cable shown on the cable label.

e.g: you have the 3000w inscreed cable, total free floor space 20 square metres divided by 150m = 133 mm spaces

STEP 3 –

Install the coldtail section of the cable (As per AS/NZS 3000:2007 39.6.B) and both thermostat probes up the conduit or in the wall cavity, making sure that the connection between the heating cable and the coldtail is imbedded in the sand/cement screed.



STEP 4 –

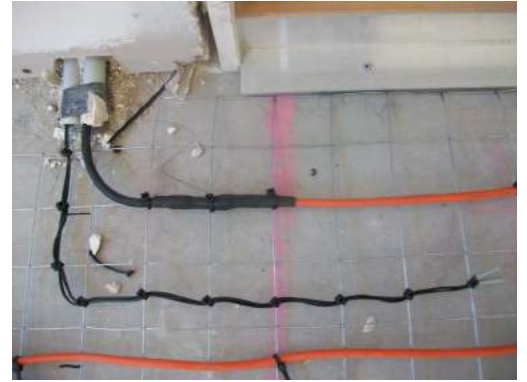
Start to tie the cable to the mesh using cable ties at the correct spacing, simply wind the cable back and forward until the cable runs out, there is no need to return back to the thermostat as it is a twin core cable.

NB: It may be necessary after about half of the tying down of the cable to reassess the spacing to more or less, according to how much cable is left.

STEP 5 –

After you have installed the heating cable it is time to install both the floor sensing probes.

It is very important to position these in the middle of 2 heating cables, if it is too close to a cable false readings will be given. Position the end of the probe approx. 30cm into the room.



STEP 6 –

Testing:

After cabling is complete it is necessary to test both cables with a multimeter, to ensure cables have not been damaged. The heating cable resistance can be seen on the cable. The probe resistance is written on the tag near the probe.



A time of approx. 2 weeks should be allowed after tiling has been finished, before turning on heating, to allow cement and glues to be fully cured.

STEP 7 -

Take photos of your installation and the floor sensing probe position. If a warranty claim is made for any reason these will be requested.

Thermostat:

Instructions for the installation and programming of thermostat are supplied in the box with the thermostat.

For any further advice please call 0414 574 806.