

Installation Guide

for in concrete slab heating kits



Important things to remember

Please read these instructions carefully before installing your Customheat underfloor heating kit

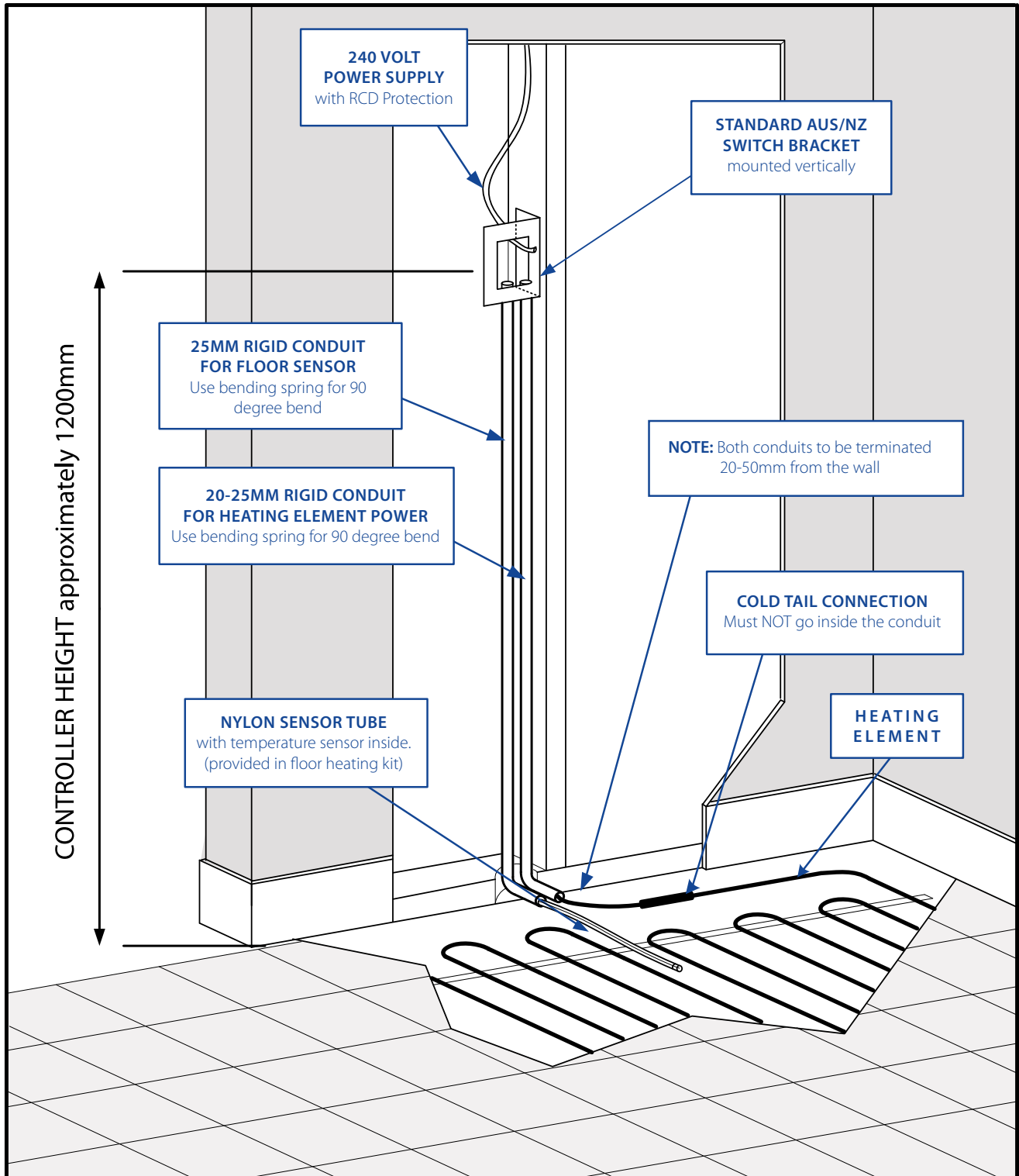
- The heating element should not be in direct contact with any waterproofing or other product other than concrete it is set into, as the heat from the element may effect a waterproofing membrane or other substance in contact with the element.
- It is important to install and test the floor sensor and thermostat to the heating mat so that the floor will not overheat while running
- Do not have any part of the element or cold tail join in the air while the element is running . If this occurs the element may fail through over-heating and your warranty will be void
- Make sure the element and cold tail join are covered in tile adhesive, cement screed or concrete
- Install under free walking spaces only. Do not install heating under areas where room fixtures will be installed
- Do not turn your floor heating on until the concrete has cured correctly according to manufactures advice
- Coat the end joint (black heat shrink) and the cold tail joint (heat shrink section where blue element joins to black flex power lead) in waterproofing, sikaflex or silicone so that any moisture will not enter the connections
- Please take some pictures during the installation process and retain your electricians details to aid in case of any future warranty claim. Without proof of correct installation we cannot replace any products under warranty
- Please refer to our 'Terms and Conditions' on our website for our full terms of sale
- Use the information in this manual as a guide only. Always seek and follow the directions of your licensed builder and electrician. Always check with the relevant licensed personal for installation details such as using suitable building materials including correct waterproofing products with this heating product. Also, relevant building and electrical codes and rules should be checked as these are updated from time to time, so it is important to seek advice from the relevant qualified authority.

Installing

- A licensed electrician must be the person who connects the heating kit to the power supply
- Install wall conduits and switch bracket as per 'electrical setup' page in this manual
- Draw up a plan of the room you are installing the heating into. Mark in the permanent items that will be installed into the room (toilet, bath, shower, vanity, etc)
- Calculate the free floor area that will be heated, then check that the heating you have is of the same or lesser size
- When laying the steel reinforcement for the concrete slab, lay with the top bars running in the direction you will be running the heating element cable. This will usually be in the longer direction to allow for less runs of the heating element cable
- Staying 100-200mm off the walls is generally good practice
- Never allow the element to cross itself
- Never cut or damage the element
- For larger heated areas where several steel reinforcement sheets are being installed, it is important to tie these sheets together securely with cable ties and not just tie wire, so that no movement occurs between the sheets
- Attach the heating cable beside the top bar of the steel mesh with cable ties, securing every 1m
- When placing the concrete, only agitate in an area where no heating is installed
- Install the floor temperature sensor probe tube supplied in the kit. This tube allows the sensor to be replaced in the future if required. The supplied sensor tube can be placed in a standard rigid 20- 25mm electrical conduit to keep it straight
- Custom Heat in slab heating cable is designed for up to 100mm thick concrete slabs. Keep in mind that the closer to the top side of the concrete that the heating cable is installed the better the heating kit will perform.

Electrical setup

for in concrete slab floor heating

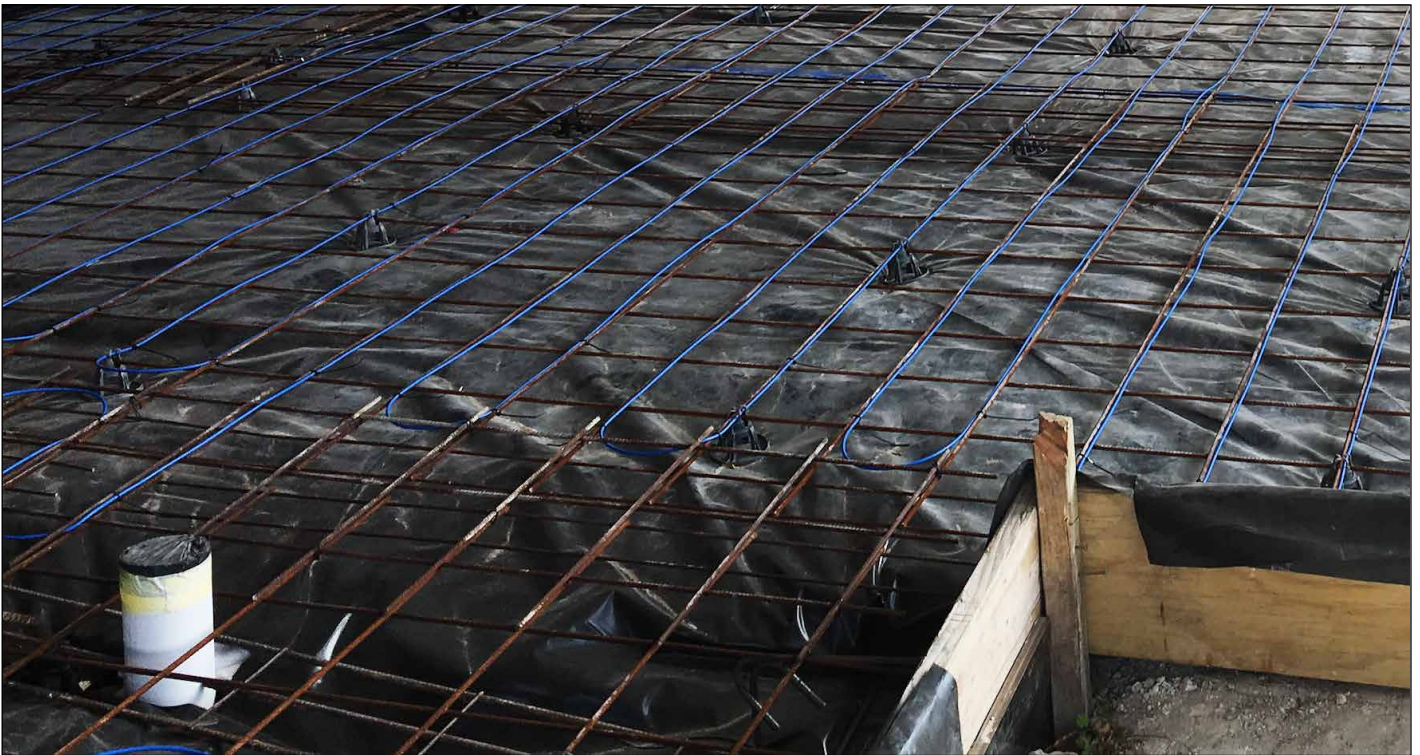


For tile over heating element installations, the floor may need to be chased to allow the sensor tube and cold tail connection to sit low enough to be tiled over.

NOTE: All electrical work must comply with the current electrical regulations in your area.

In Concrete Slab Heating Installation

Example



Sensor Tube System

for in concrete slab heating installations

The sensor tube system allows for the easy installation & removal of the in-floor temperature sensor. Should the sensor need replacing any time in the future, the sensor tube system will make this an easy task.

LOCATION

The sealed sensor tube end should be located in the floor between the heating cables so that the sensor will measure a typical floor temperature.

The sensor tube should not pass over or under the heating cable.

TUBE INSTALLATION

Install the sensor tube in one conduit from the floor up with the sealed end located at the floor. Ensure all bends are large radius and smooth to allow the sensor to easily slide down the tube.

The sealed end of the sensor tube should be suitably located to allow the sensor to measure the typical floor temperature.

Secure the sensor tube in place on the mesh with cable ties. Any excess tube at the controller point can be trimmed back to the bottom of the switch bracket.

TIP

To make sure the sensor tip does not slide away from the end of the tube, once it is in place wrap some tape around the top of the tube. This will hold the sensor in place within the sensor tube, stopping it being accidentally pulled back.

