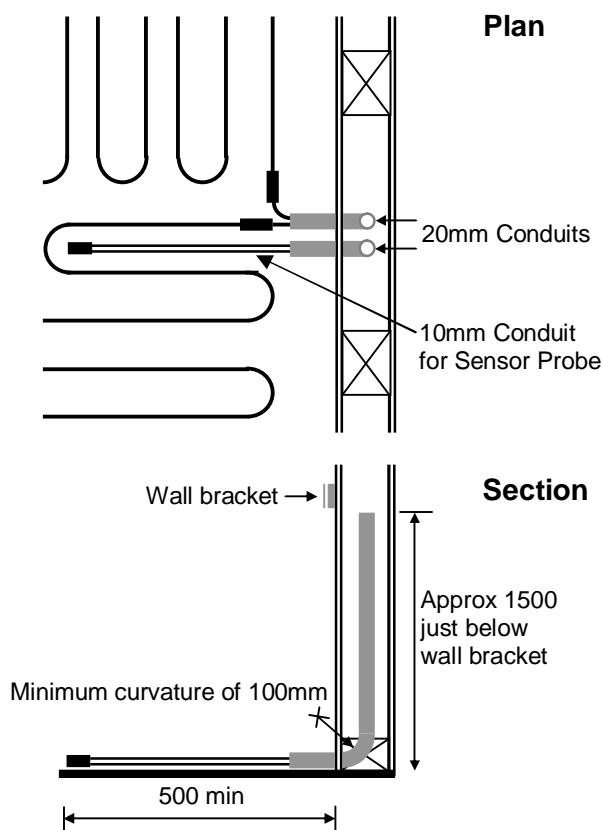


## Pre-Installation Checklist

- ◆ Determine location of thermostat and power supply
- ◆ Ensure adequate capacity of power supply circuit
- ◆ If contactors are required, ensure control wiring is in place  
Refer to relevant Contactor Connection Diagram
- ◆ In the event that two or more heater cables are required, ensure that an additional 20mm conduit has been installed for each additional heater cable
- ◆ Ensure heating circuit is protected by an RCD



## Conduit Installation



- ◆ A minimum of 2 x 20mm conduits need to be installed as shown
- ◆ Conduits only need to extend into heating zone by 100mm and should finish just below wall bracket (approx. 1500mm off floor) for easy access when connecting power and thermostat
- ◆ Avoid sharp bends in conduits (min. curvature of 100mm) and avoid multiple bends
- ◆ One conduit is to be used for each pair of cold tails
- ◆ One conduit is to be used for floor sensor probe
- ◆ We recommend that a 10mm flexible conduit be inserted into the 20mm floor sensor conduit and then extended 500mm into the heating area and taped at the end
- ◆ The floor sensor probe (supplied with thermostat) is inserted into the conduit until it reaches the end
- ◆ The floor sensor probe can be extended up to 50m using 1.5mm<sup>2</sup> 'figure 8' cable in instances where the thermostat is remote to the heating zone

## Cable Installation

**Step 1** Calculate free floor area – Total room area less any permanent fixtures such as a Cupboards etc

**Step 2** Check cable spacing

$$\text{Cable spacing (mm)} = \frac{\text{Free Area (m}^2\text{)} \times 1000}{\text{Cable Length (m)}} \quad \text{e.g.} \quad \frac{16.5 \times 1000}{170} = 97\text{mm}$$

Cable spacing should be around 100mm –

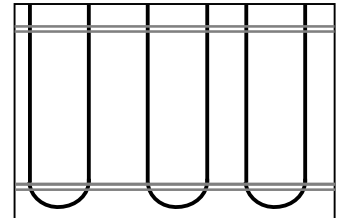
If spacing is <80mm or >105mm then cable needs to be changed **DO NOT CUT THE CABLE AT ANY TIME**

**Step 3** Plan Cable layout ensuring the following:

- ◆ Ensure an even coverage across the room
- ◆ Cold tails should be positioned close to power supply  
The entire heating element **must** be embedded in the screed bed
- ◆ Sensor probe conduit should be positioned close to thermostat location
- ◆ Sensor probe conduit should be placed between two cable runs as shown below
- ◆ Spacing from walls and fixtures should be 100mm  
(50 min – 150 max)
- ◆ Cable spacing should not be less than 75mm  
In the event that several 75mm spacings are required, ensure that they are evenly spread out across the room
- ◆ Cable spacing should not be more than 100mm  
In some cases you may be required to come in off the walls and fixtures up to a max of 150mm to obtain desired spacings, otherwise a larger cable size is recommended

**Example:**  
How to achieve an average  
cable spacing of 95mm

100 100 100 75 100



**Step 4** Nail devifast fixing strips to floor with no more than 700mm between strips

End strips require extra nailing due to strain from cable, we recommend nailing at 300mm centres

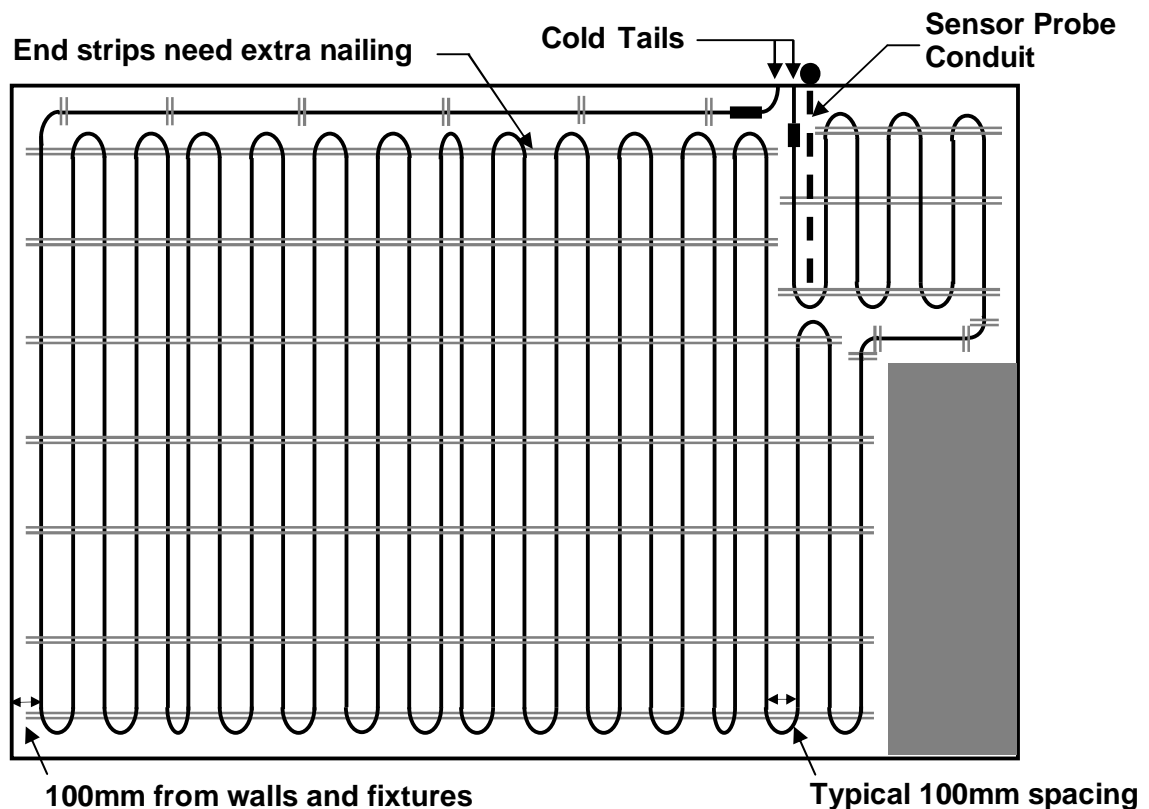
**Step 5** Fasten down the ends of each cable run into the devifast fixing strips. See diagram overleaf

Do not fasten down the entire cable until you are completely satisfied with the cable layout

**Step 6** Fasten down rest of cable with the devifast fixing strips

**Step 7** Insert cold tails up cable conduit

**Step 8** Tape the end of the Sensor Probe Conduit and insert sensor probe down conduit ensuring it reaches the end. Tape the sensor probe to the top of the conduit to prevent accidental removal



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