

## Contents

### Each Thermonet Vario kit contains the following:

Cable and dispenser

Programmable thermostat & conduit for floor sensor

Printed fixing strip

Warranty application form

Installation Guide

### You may also require:

Sub-floor preparation (ie insulation board)

Self levelling compound

Single part flexible tile adhesive

Primer, if necessary for the tile adhesive

Tiles

Grout

## Always

- Ensure you have understood this manual
- Ensure that the substrate is ready for tiling
- Vacuum the floor to remove loose dust
- Ensure the floor sensor is correctly positioned
- Adhere cables immediately after exposing adhesive strip
- Press cables firmly into adhesive strip
- Ensure the circuit is protected by an RCD
- Use a single part flexible tile adhesive or levelling compound
- Trowel the adhesive in-line with the cable runs

## Never

- Install Vario fixing strip in temperatures of less than 10°C
- Switch on a system before the tiles or levelling compound has cured
- Cut the yellow wires down in length
- Cross the yellow wires over each other
- Leave any yellow heating wire exposed

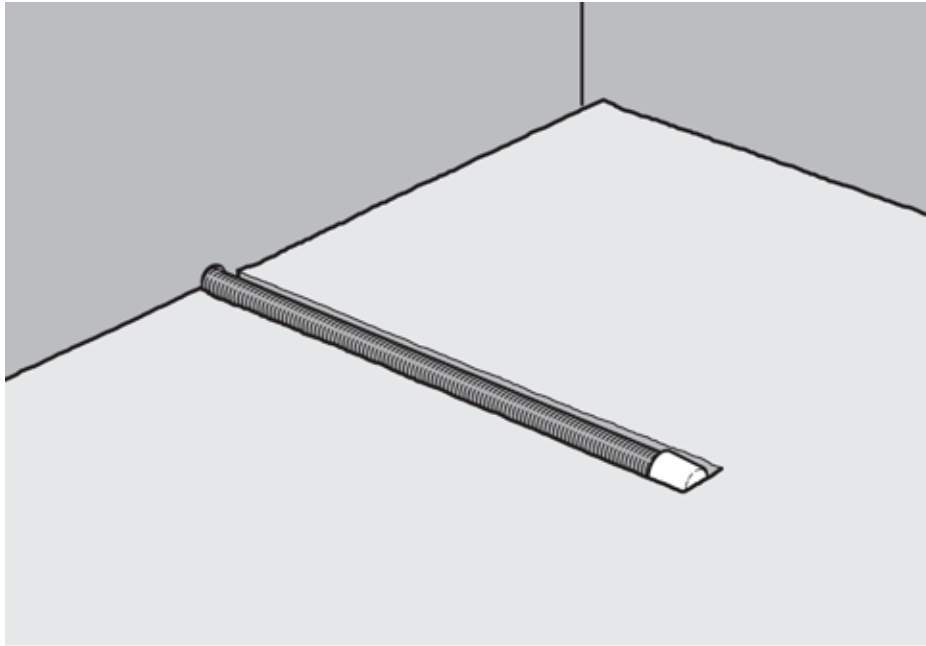


# The Complete Store for the Tile Trade

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## Thermonet VARIO (including thermostat)

STOCK NUMBER	DESCRIPTION	APPROXIMATE COVERAGE (M <sup>2</sup> ) @150w/m <sup>2</sup>	APPROXIMATE COVERAGE (M <sup>2</sup> ) @100w/m <sup>2</sup>	SIZE (LM)	HEAT OUTPUT (WATTS)	RESISTANCE Ω
2101	KIT 1	0.5	1.0	8	100	572
2102	KIT 2	1.0	2.0	13	200	286
2103	KIT 3	2.0	3.0	20	300	180
2104	KIT 4	3.0	4.0	29	400	125
2106	KIT 6	4.0	5.0	41	600	90
2108	KIT 8	5.0	6.0	55	800	69
2110	KIT 10	6.0	8.0	69	1000	55
2112	KIT 12	8.0	10.0	85	1200	43



## Preparation

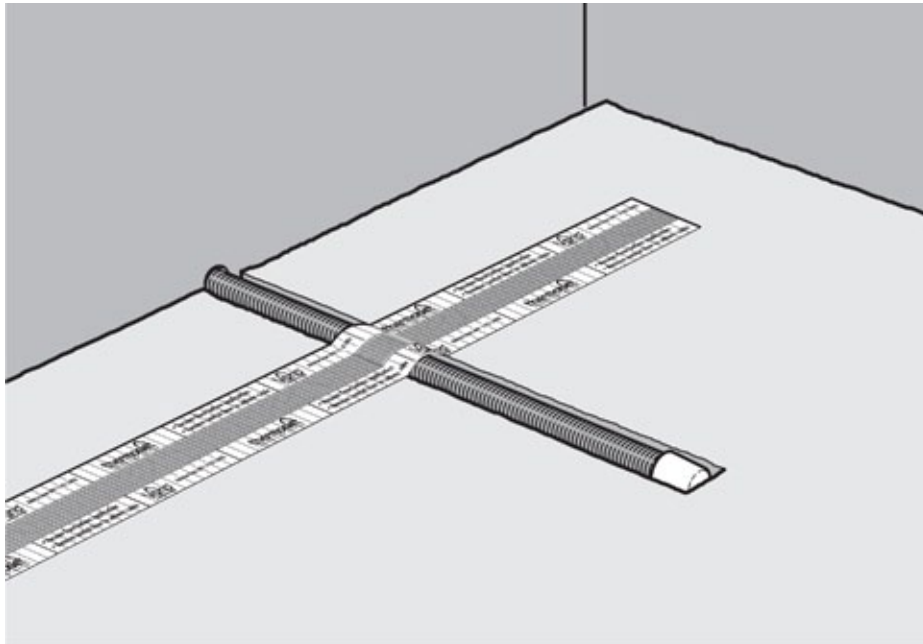
Ensure the substrate is ready for tiling; clean, dry and level. Vacuum it to remove dust. On timber substrates we recommend overlaying with Dukkaboard as this will stiffen and insulate the floor. Concrete substrates will benefit from being overlaid with Econoboard to improve the insulation of the substrate. For further information contact our sales department.

If primer is required, follow your chosen tile adhesive manufacturer's recommendations.

Chase a channel in the floor, to allow the sensor conduit to reach from the thermostat position into the heated area. This should terminate centrally between two yellow wires.

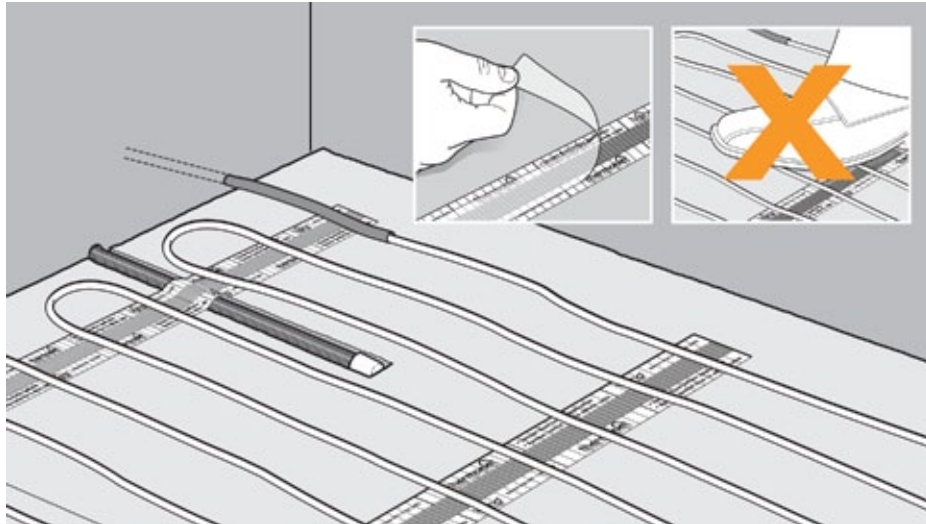
The thermostat will require a 35mm deep single gang box 5275 mounted at a suitable height from the floor with 2x 20mm conduits running to the floor.

Thermonet Vario is suitable for use in wet rooms. All electrical circuits must be protected by an RCD.



## Setting Out

- Measure out the available floor space, i.e. exclude fitted cupboards, sanitary ware, matwells, etc, and come in from the edges 100mm.
- Use the following calculation to work out the cable spacing.  
$$\frac{\text{available space (m}^2\text{)} \times 100}{\text{cable kit length (m)}} = \text{spacing (cm)}$$
- Apply a run of fixing strip by peeling off the underside and sticking along two opposite sides of the room approximately 200mm from the wall.
- Apply further runs of fixing strip at no more than 500mm apart, parallel to the edge runs.
- Cables should not be closer than 50mm from each other or from the perimeter of the room and fixed objects.



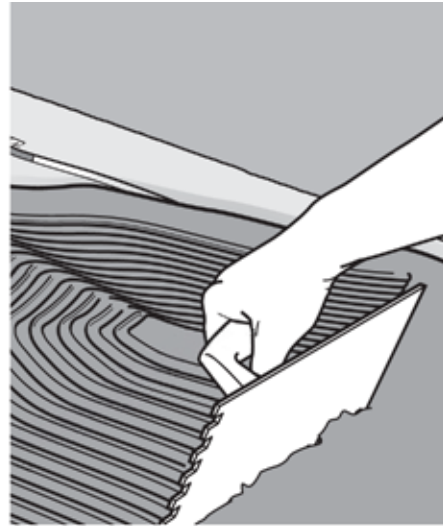
## Laying Cables

- Peel off the central adhesive covers of the outer runs of fixing strip and retain for later use.
- Using the lay marks on the fixing strip, loop the cable from one side of the room to the other, counting out the spacing worked out in the setting out section on page 5. Ensure cables are kept taut.
- Secure the cable at each end pressing into the central adhesive band of the fixing strip. Peel off the adhesive covers of the other fixing strips (retaining for later use) and press the cable into the adhesive at each point to secure it.
- Once cables are in position reverse the adhesive cover and stick down over exposed adhesive
- Avoid unnecessary foot traffic and do not allow other trades into the heated area until the cables are protected/covered with a levelling compound or tile adhesive.
- Remember - never cut the yellow heating cable - utilise the entire length within the available floor area.



## Testing

- Using a multimeter, check the resistance of the Vario cable between the brown and blue wires and compare the reading with that on the factory test certificate attached to the connection lead.
- Record the reading on the warranty card and retain a copy for the customer file.
- Do not proceed with tiling if the reading is out of tolerance. Upper limit = +10%, Lower limit = -5% of the resistance value on the label attached to the connection lead.
- Under **no circumstances** should the heater be shortened or joined in series to another heater.
- Check with an insulation tester between the centre cores (brown/blue) and earth to ensure that there is no damage to insulation.



## Wiring & Tiling

- Make sure the wiring is carried out or checked by a part P qualified electrician in accordance with current electrical standards.
- Always use a good quality cement based flexible tile adhesive and grout.
- Take care when trowelling the adhesive not to snag the cables and trowel in line with the cable runs
- Allow the tile adhesive and grout to cure before switching on the heating following adhesive manufacturers guidelines). Minimum 7 days.