

VarioComp Floor Probe Install Guide

Installing Floor Probes

Central Heating New Zealand's approach to underfloor heating control involves managing both air and floor temperatures, while the air temperature is the main aspect used for the management of the heating, the floor is maintained between minimum and maximum floor limits in the background. This strategy is designed to minimise temperature lag and overshoot, thereby enhancing occupant comfort and system efficiency. With all underfloor heating systems floor probes are recommended, and while Variocomp systems have less lag than other forms of underfloor heating the inclusion of floor probes with these systems is still strongly recommended.

Floor Probe Locations

Commonly, floor probes are installed with a section of underfloor pipe used as a conduit for the probe to terminate equally spaced between two heating pipes, the conduit is then run back to the wall or back to the manifold to then be extended to the location of the thermostat. These details are always shown on our underfloor drawings — see Figure 1 for example.

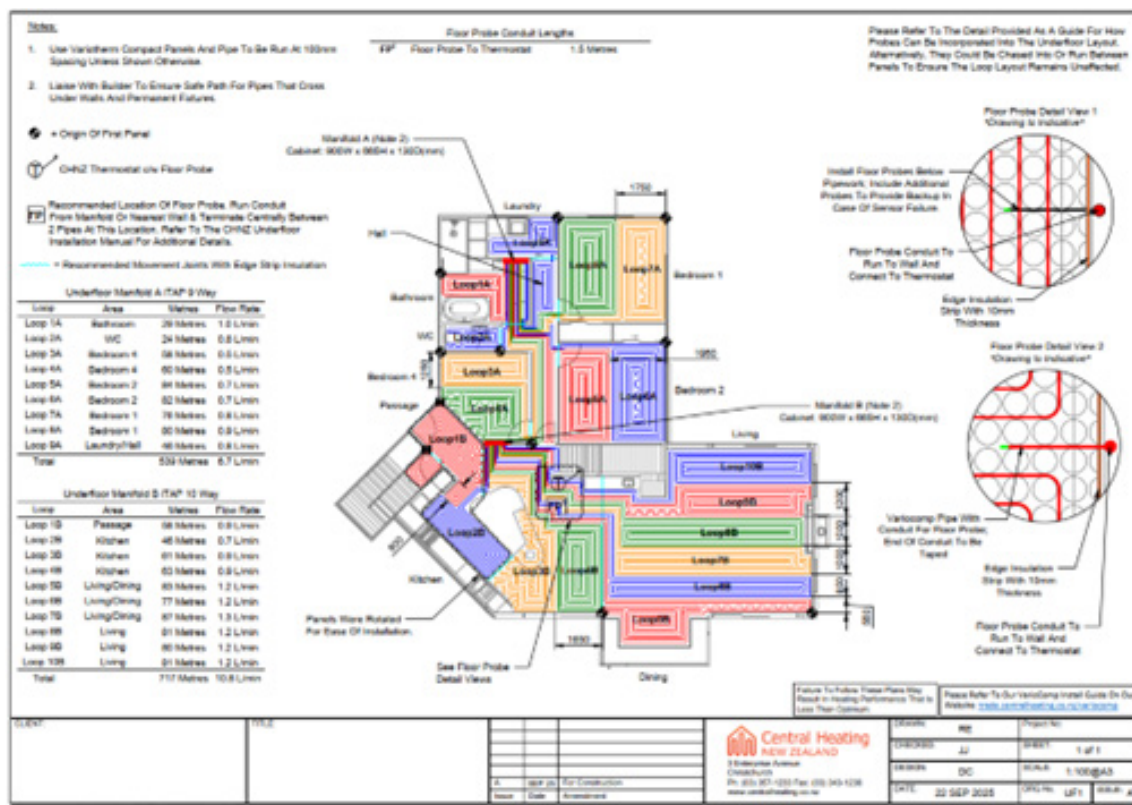


Figure 1: Underfloor Layout Example with Floor Probe Detail

Floor Probe Detail 1

This method involves routing the floor probe beneath the Variocomp pipes without the use of a conduit. In this method as the probes cannot be removed or replaced after the filling compound is applied it is recommended to install 2-3 probes at each location to provide future redundancy should a probe fail. See Figure 2 for layout.

Floor Probe Detail 2

Another method we propose is to adjust the Variocomp pipe layout in a small area to accommodate a conduit pipe for housing the floor probe. This method reduces the need for multiple floor probe installations by allowing easier access for replacement in the event of a fault. However, this approach may result in a variation to the Variocomp layout around the probe area. See Figure 3 for layout.

Thermostat and floor probe locations are clearly marked on our underfloor layout drawings using the following symbols, and a table detailing conduit lengths is included to further assist with installation. See Figure 4 for reference.

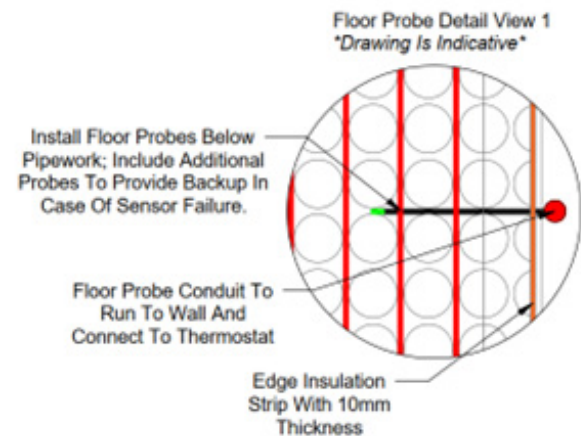


Figure 2: Floor Probe Detail View 1

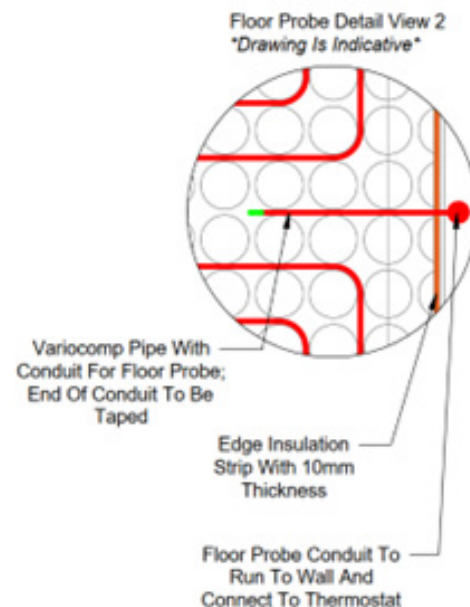


Figure 3: Floor Probe Detail View 2

Floor Probe Conduit Lengths		
FP¹	Floor Probe To Manifold A	3 Metres
FP²	Floor Probe To Thermostat	2 Metres
FP¹	Recommended Location Of Floor Probe.	
FP²		
T	CHNZ Thermostat	

Figure 4: Table and Symbols used in the underfloor layouts