



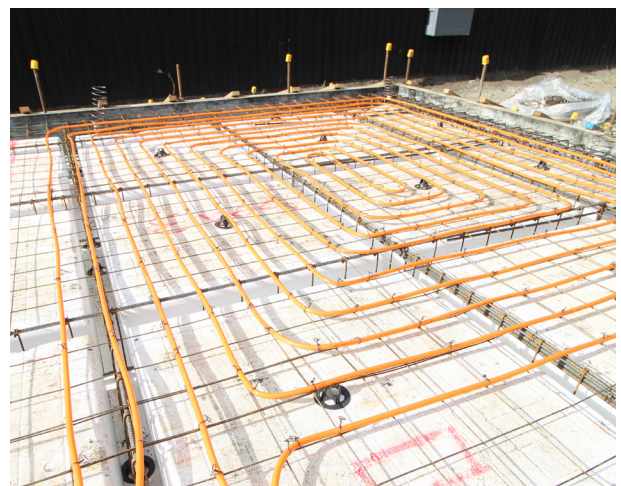
Underfloor Heating

Warm Water Underfloor Heating

Underfloor heating is the most luxurious form of heating as its radiant heat is evenly distributed throughout the room and it warms from the floor up, which is the ideal heat distribution for the human body (warmest at the feet, coolest near the head).

Warm water underfloor heating achieves this high level of comfort with no aesthetic impact on the home. The underfloor pipes are laid beneath the flooring, which means the system is hidden from view and, unlike radiators or surface mounted hot air heat pumps, takes up no wall space.

The heat from the underfloor system can be produced by air-to-water or geothermal heat pumps or gas, diesel or biomass boilers. This flexibility, coupled with economical running costs, gives warm water underfloor heating an advantage over many forms of heating, including electric underfloor heating.



- Ideal heat distribution for human body (warmest at the feet, coolest near the head)
- Suitable for all floor types
- Home is always warm when you come home
- Options available for new and existing homes
- Different zones can be set to different temperatures

Available Methods

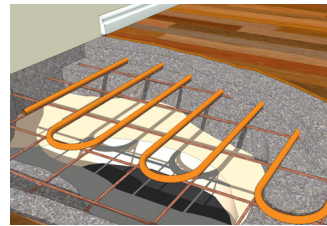
Central Heating New Zealand provides four main types of warm water underfloor central heating. A team of design engineers will work with you to determine which method is right for your heating needs and house's structure.

The Kiwi Inslab Method, where the pipes are laid into the home's concrete slab, is the most common method in New Zealand. It is a great underfloor heating option due to low installation costs and ease of installation. Because existing homes already have a slab in place, this method is only possible in new homes.

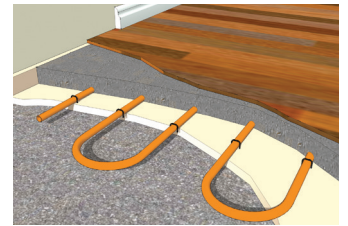
With a faster reaction time than the Kiwi Inslab method, the European Screed Floor method is the most common method of underfloor heating outside of New Zealand. It is possible to install screed over an existing home's concrete slab, but because it requires major renovation, it is generally installed in new homes.

The Spreader Plate System, which is for joisted wooden floors, uses slotted metal panels to hold the pipe in place between the floor joists. This makes pouring a concrete slab or screed over the pipe unnecessary, making it ideal for new homes during construction and existing homes with access, as well as for underfloor systems in multi-storey homes.

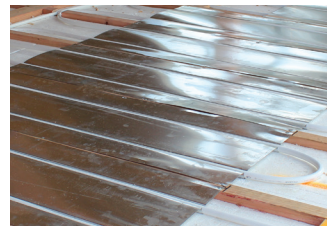
VarioComp is a quick reaction, light weight overlay system for both new and existing homes. It is the most efficient of all the warm water underfloor heating methods due to the closely spaced pipes and thin profile.



— Kiwi Inslab Method



— European Screed Floor



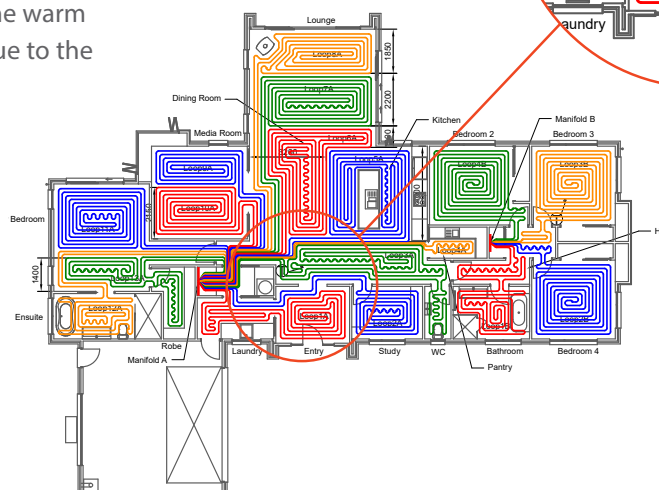
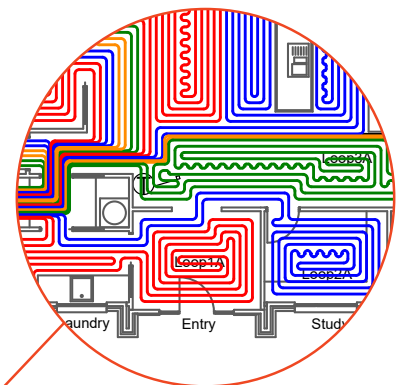
— Spreader Plate System



— VarioComp



— Underfloor manifold cabinet tucked away in a closet, with cover removed



— Example underfloor pipe layout