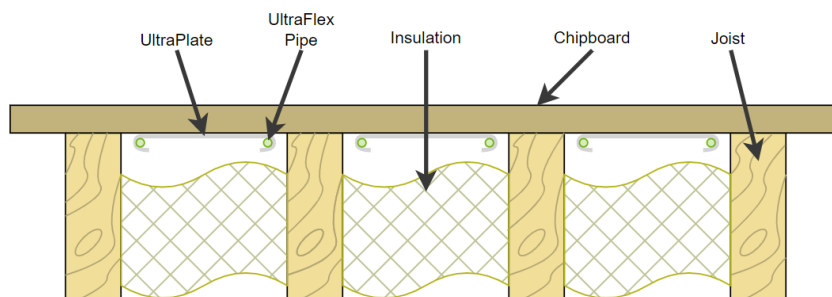




Underfloor Heating & Renewables

UltraPlate

Installation Guide



UNDERFLOOR
HEATING

GROUND SOURCE
HEAT PUMPS

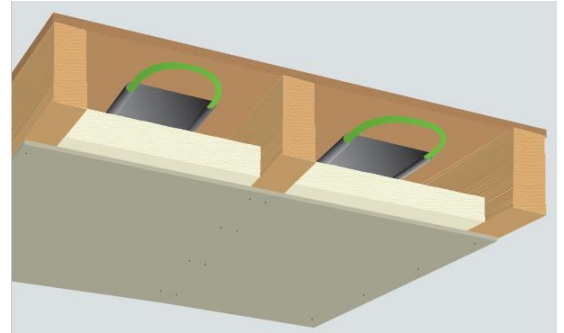
AIR SOURCE
HEAT PUMPS

SOLAR
THERMAL PANELS

Description-

Lightweight, aluminium panel UFH solution for joisted floors.

Ideal for timber joisted floors, UltraPlate is installed either on or between joists to heat the floor above. A truly adaptable heating solution, UltraPlate can either be fitted between the joists beneath the flooring, or on top of joists before the chipboard floor deck is fitted. A lightweight aluminium panel holds the UltraFlex pipe in place to deliver even heat distribution across the floor. Adding no additional height to the floor level, UltraPlate is perfect for properties with lower ceilings or limited head height.



UltraPlate Panel Installation –

Our UltraPlate panels are to be installed evenly between joists directly to the underneath of the chipboard floor above.

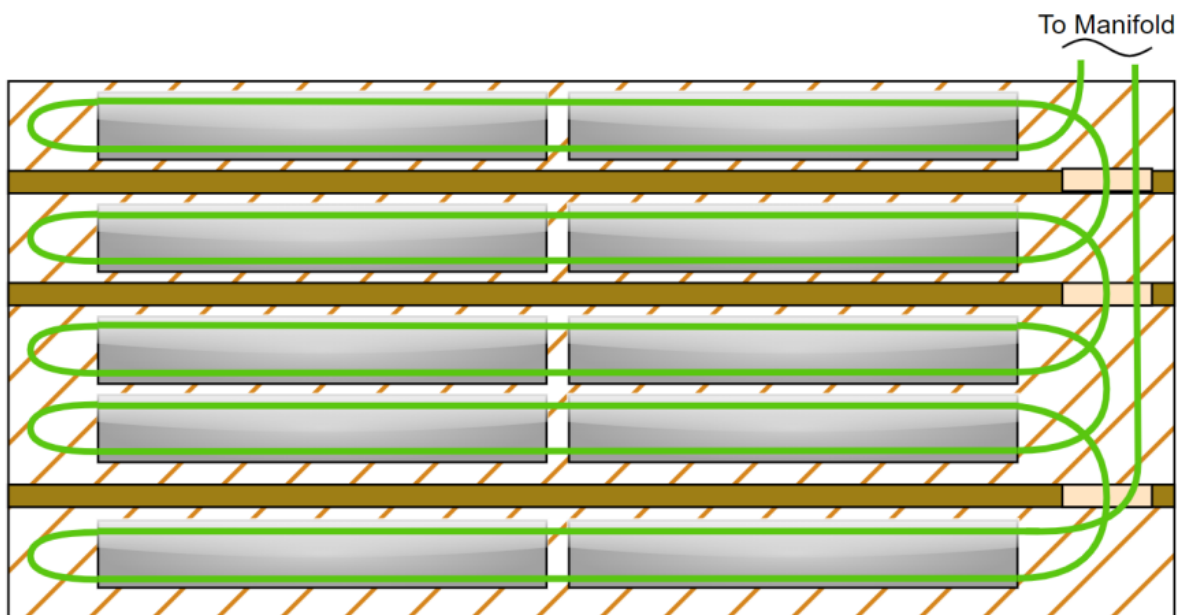
This is achieved using the self-drilling screws that we provide (included in every project). We advise the use of a minimum 8 screws per plate. We also recommend the installation to mimic the diagram provided here to assure maximum contact area with the floor above. This method of underfloor heating utilizes the UltraPlate panel to spread the heat from the UltraFlex pipe across the aluminum plate. Therefore the more contact area between the plate and the chipboard flooring, the better the output of the system.

UltraPlate Pipe Installation-

Our UltraPlate panels are produced to hold our 14mm UltraFlex pipe with confidence.

Once the panels are installed, the pipe is to be slotted into the sides of the panels, to create “loops”.

These loops should span the full length of the room to be heated (which will be labelled on the design plan provided). At one end of each joist space will include a 180° bend to return down the opposite side of the tray. When traversing between joist spaces, the pipe should always run outside to outside of the trays as shown below. This is with the exception of the final joist space, in which, the return pipe will run directly back to the manifold location.



Joist Types-

With each project, there will be discrepancies on joist type and how to pipe our UltraPlate system.

Included below are the 4 main ways to bypass the joist types.

1. Posi Joist – This joist system is the easiest and most convenient when installing the UltraPlate system. When dealing with Posi Joists, the pipe can be threaded through the spaces in the webbing.
2. Traditional Joists- With Traditional Joists, the most time effective solution is to notch the top of each joist, allowing the number of pipes required to pass through. Please refer to building standards when choosing location, depth and width of notches.
3. Traditional / “I” joists – The solution to “I” Joists is to drill holes through each joist, threading the UltraFlex through into each joist space. This method can also be applied to traditional joists. Please refer to building standards when choosing location and size of drill holes.
4. Traditional / “I” Joists – A further solution to bypassing the joists without needing to drill, is to lower the ceiling height of the room below by installing batons to the bottom of each joist. When installing the batons, space is to be made along the baton to allow the passing of UltraFlex pipe below the joists.

