

# MANIFOLDS

Manifolds are common to all systems above 25m<sup>2</sup>, independent of the floor application. Manifolds are supplied complete and positioned on a bracket. They can either be fixed directly to a wall or positioned in a manifold box.

The manifold comes complete with a drain and air vent assembly, which can be positioned on either end of the manifold. Isolation valves are supplied separately for the supply end of each manifold.

The bottom manifold is the flow and the top manifold is the return. Each manifold port comes complete with a Polyplumb push fit connection. Pipes are connected to manifolds by inserting a pipe stiffener into the pipe and following the instructions on pages 32-33.

The flow meter on each flow port of the manifold provides a visual indication of the flow through each circuit.

Both manual and lockshield balancing can be undertaken by either using the blue cap on the return manifold for manual adjustment, or removing the blue cap and adjusting using the key supplied with each manifold.

## Preparing and installing the manifold

Remove the manifold from the box and arrange the flow and return manifolds to ensure that the inlets/outlets are pointing downwards. Remove the air vent and drain valve from the packaging and connect to the desired end of the manifold.

Ensure the seal is correctly in place before tightening the compression nut by hand on to the manifold. To ensure the valves are securely connected to the manifold, use a 38mm spanner or wrench to tighten by a further half turn.

Remove the isolating valves (supplied separately) from the packaging and connect to the opposite end of the manifold. As with the air vent and drain valve, ensure the seal is correctly in place before tightening the compression nut by hand on to the manifold. Then, as previously, complete the connection by using a 38mm spanner or wrench to tighten by a further half turn.

Fix the manifold horizontally in the desired position utilising both screw holes on each bracket.

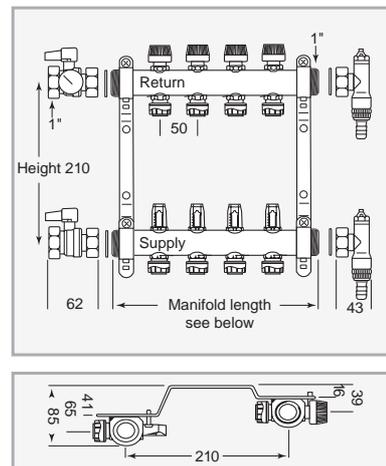
The manifold is now in position and ready to be connected to the mains from the boiler and the floor heating circuits. A set of self adhesive stickers are included to help identify each circuit on the manifold.

The stickers also provide the opportunity to record the number of turns required for the correct flow rate through each circuit (for further information see testing and commissioning on pages 34-35).

## Flow setting and adjustment

As with any type of wet heating system, it is a necessity to pressure test a floor heating system to check the integrity of all the joints. To set the flow rate of the circuit remove the protective blue cap from the manifold port. Using the key, turn the spindle clockwise until the manifold port valve is fully closed.

Adjust the flow of the port by turning the spindle anti-clockwise. Three full turns of the spindle will open the valve fully. Flow through the valve can be measured by the flow meter on the flow ports of the manifold. Once each manifold port has been set to the correct flow rate the protective blue cap can be refitted. Alternatively, if zone control is being utilised actuators can be fitted to the relevant ports.



Ports	Length (mm)
2	120
3	170
4	220
5	270
6	320
7	370
8	420
9	470
10	520
11	570
12	620