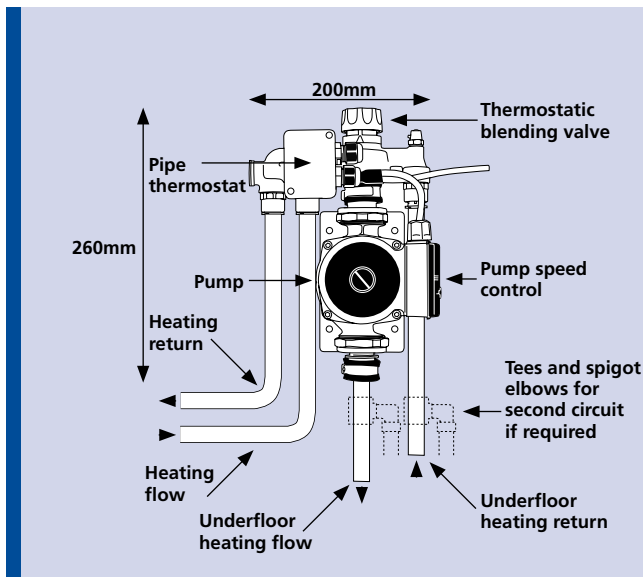


SINGLE ROOM APPLICATIONS

All Polypipe underfloor heating systems can be installed in single rooms and connected to the existing wet heating system. In rooms greater than 30m² it is recommended that the connection to the underfloor heating system is made via a manifold and installed in the same way as a multiple room installation with single area control.

Areas of up to 30m² should use the Polypipe Zonal Regulation unit (ZRU) as this provides a simpler method of connecting into the existing system, without the need for expensive hydraulic or electrical alterations.



The ZRU simply connects to the existing heating system providing:

- Water temperature control (30°C to 60°C) for the underfloor heating
- The correct flow rate the underfloor heating
- Automatically switches On and Off via a built-in pipe thermostat
- A wiring connection for a room thermostat or wireless sensor
- Can be connected to operate the underfloor heated room independently with the existing system

Connections to the existing wet heating system

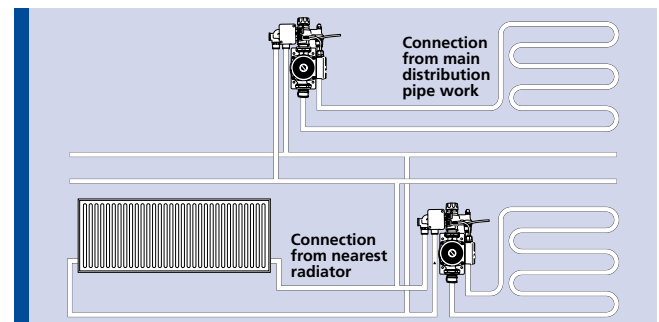
The pipe work connections to the ZRU are for 15mm diameter pipe and the ZRU should not be connected to the system from any pipe smaller than 15mm.

A small number of boilers can be affected hydraulically by the use of a second pump in the system.

NOTE: Check with the boiler manufacturer to ensure compatibility with the ZRU.

The preferred connection to the ZRU is to the main flow and return pipe work of a 2 pipe system, i.e typically from 22mm distribution pipe work. However it can also be connected to the nearest existing radiator.

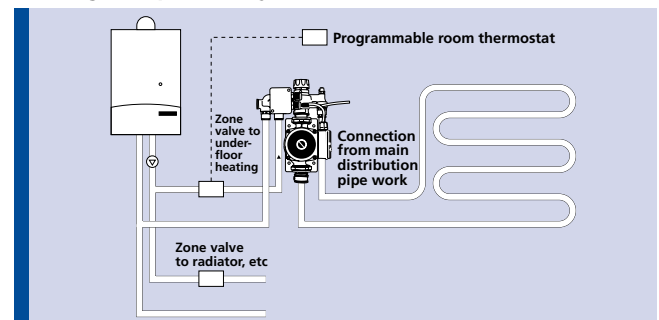
Pipe connection to operate underfloor heating at the same time as the boiler



The diagram above shows the ZRU connected to operate with the boiler on/off firing. Due to the quick response of low mass systems (Overlay™, Overlay™ Lite, MHP, etc) this is likely to be suitable. Using this method for solid floor installations may require the timings of the existing heating to be altered to allow the underfloor heating system to reach comfort temperature.

If the room is to be controlled independently of the existing central heating system, a zone valve needs to be installed between the boiler and the ZRU.

Pipe connection to operate ZRU / underfloor heating independently



The pipe supplying the ZRU should be connected to the main boiler distribution pipe prior to the connection of other zone valves.

A programmable room thermostat can be used to operate the zone valve and, in turn, the end switch within the zone valve can provide a signal to fire the boiler.

Installation of ZRU

The ZRU can be positioned either in the room where the underfloor heating is installed or in an adjacent area, 300mm from the finished floor level to allow for pipe connections.

Fitting the ZRU

Step 1:

Screw unit to wall.

Connecting the ZRU

Step 2:

Connect heating pipe work via an isolation valve (as shown).

Step 3:

Connect underfloor heating circuit(s) using an isolation valve. Use tees and spigot elbows to form connections for 2 and 3 circuit systems.

Step 4:

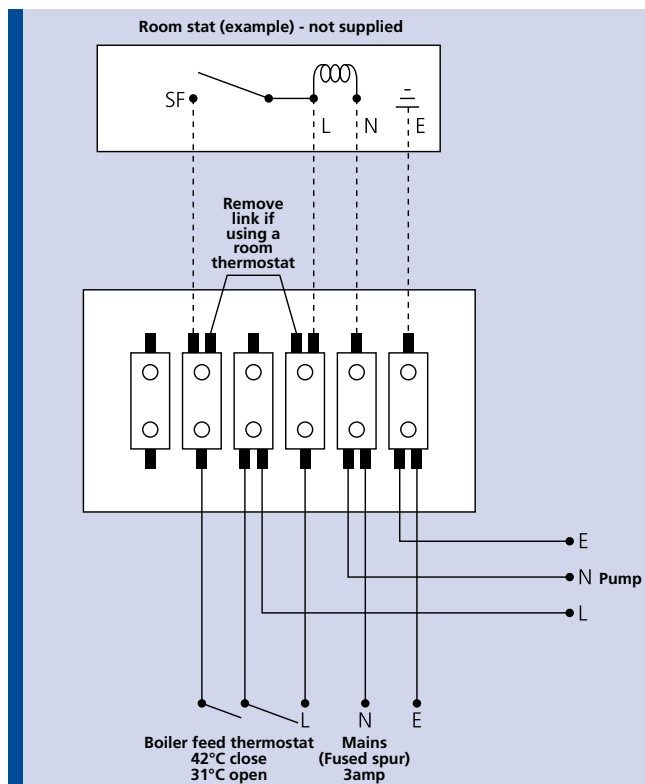
Connect mains wiring (as diagram below) via a fused spur.

Wiring details

IMPORTANT NOTE: If in any doubt you should contact a qualified electrician.

The water temperature must be 45°C to operate the unit.

Wiring diagram



Filling the underfloor heating system

Use the heating system to fill the underfloor heating circuits and ZRU.

Blanking off the ZRU

Step 1:

Remove the underfloor heating return pipe from ZRU and blank off the ZRU underfloor heating return port with a short pipe with a blank end or a blanking plug.

Filling the ZRU

Step 2:

Allow open ended underfloor heating return pipe to drain into a bucket or hose.

Step 3:

Open the flow isolation valve to the ZRU.

Step 4:

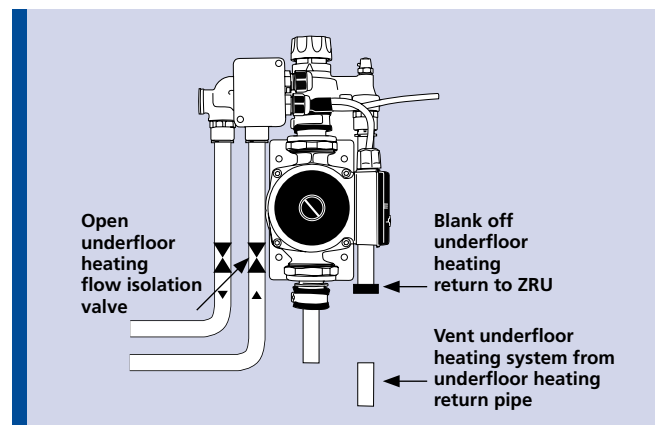
When uninterrupted flow is seen from the underfloor heating return pipe, close the isolation valve and re-connect the underfloor heating return pipe to the ZRU.

Step 5:

Open all the valves.

Step 6:

Vent the ZRU through the air vent and pump vent.



Room packs

A range of room packs containing all flooring and ZRU are available

Type	Solid Floor	Overlay™	Overlay™ Lite
Area	12m ² (So12Z)	12m ² (O12Z)	12m ² (OL12Z)
	20m ² (So20Z)	20m ² (O20Z)	20m ² (OL20Z)
	30m ² (So30Z)	30m ² (O30Z)	30m ² (OL30Z)

A 5m² Overlay™ Bathroom Pack (O5B) is controlled with a temperature limiting valve rather than the ZRU