

## PRODUCT INFORMATION

ISSUE 1 – NOVEMBER 2020

Product Code: PB08030

Designed for use in timber suspended or battened floors, Polypipe's suspended floor system uses aluminium double heat spreader plates to transmit the heat evenly across the finished floor surface.

Suitable for joist widths of 300mm to 450mm, the spreader plates are simply fixed to the joist using small nails or staples. The ultra-flexible underfloor heating pipe is then run into the pre-formed grooves of the plates, which are designed to hold the pipe securely in position.

A layer of insulation below the panels will ensure that almost all heat generated passes up into the room. Wooden support battens should be fixed to either side of the joists at a depth that ensures that the panels are in direct contact with the underside of the structural floor, thus ensuring optimum system performance.

Polypipe's suspended floor system is also suitable for use with "sprung" flooring systems.

### Product Information

The plates are manufactured from high quality reflective aluminium that allows heat to dissipate laterally, thus reducing the occurrences of "hot & cold spots" across the floor.

The plates are supplied in two sizes covering the vast majority of installation requirements and the grooves are positioned so that the system achieves an average of 200mm or 225mm pipe centres.

Polypipe's spreader plates accommodate for 15mm diameter pipe only.



- 1 Supporting joists
- 2 Insulation
- 3 FFB Double Heat Spreader Plate
- 4 Pipe
- 5 Timber or chipboard floor deck
- 6 Ceiling

Product Code	Description	Pack Quantity
PB209	450mm x 1m double indent plate at 225mm pipe centres	10
PB240	390mm x 1m double indent plate at 200mm pipe centres	

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### Key Design Information

Typical Heat Output at 50°C Mean Water Temperature	52W/m <sup>2</sup> at 225mm Pipe Centres
Recommended Design Flow Temperature	60°C
Maximum Circuit Length	100m
Maximum Coverage per Circuit	22m <sup>2</sup> at 225mm average pipe centres
Dimensions	450mm x 1000mm x 0.5mm

### Approximate Usage

Plate Usage	2 plate x m <sup>2</sup>
Ultra-Flexible UFH Pipe	4.5m/m <sup>2</sup> at 225mm centres
UFH Conduit	2m/circuit length

### Product Installation Information

- It is essential that a suitable layer of thermal insulation be installed directly beneath suspended underfloor heating systems so as to minimise any downward heat loss. It is recommended that the thermal resistance of this insulation layer should not be less than 0.75m<sup>2</sup>K/W as specified in BS EN1264-4. The insulation should fit tightly between the joists directly below the spread plates to ensure the plate is fully supported and therefore remains in contact with the underside of timber floor covering.
- The plates should be installed with a 5mm spacing so as to prevent any transmission of noise occurring as the plates expand and contracted when the system is in full operation.
- Polypipe 15mm ultra-flexible underfloor heating pipework is installed in circuits and is fixed in position by the specifically designed 'omega' shaped grooves.
- The underfloor pipework is then connected to the manifold and then pressure tested to 6 bar. It is also highly recommended once the system is pressure tested to add an appropriate percentage of antifreeze/inhibitor.
- As soon as practical after the installation is completed, the structural floor should be installed to prevent any damage occurring.