

Staple System – Solid Floor

Data Sheet

PRODUCT INFORMATION

ISSUE 2 – NOVEMBER 2020

Product code: PB02940 | PB02930 | PB02911 | PB02931

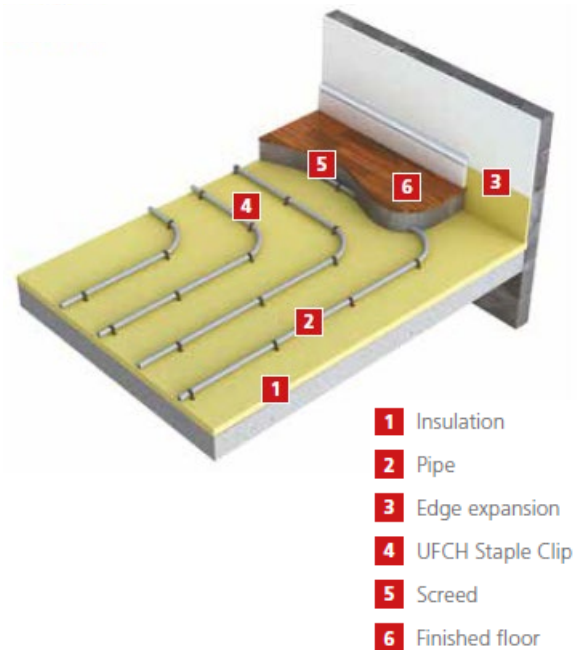
Predominately installed in new build or renovation where a floor requires excavation – Polypipe Underfloor Heating's Staple System is designed for solid or screeded floors.

Polypipe's Staple System fits directly on to the insulation layer that is laid before a screed or concrete floor is poured. This is a traditional method of installing underfloor heating into a solid/screeded floor.

Staple systems offer a cost effective solution for screeded floors, simply use the staple gun to fix the pipe directly to the insulation boards.

Features & Benefits

- Cost effective
- Minimal fixing materials needed.



Key Design Information

Typical Heat Output at 50°C Mean Water Temperature

76W/m² at 200mm Pipe Centres
91W/m² at 100mm Pipe Centres

Recommended Design Flow Temperature

50°C

Maximum Circuit Length

120m

Maximum Coverage per Circuit

11m² at 100mm average pipe centres
22m² at 200mm average pipe centres
30m² at 300mm average pipe centres

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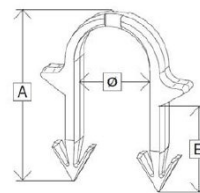
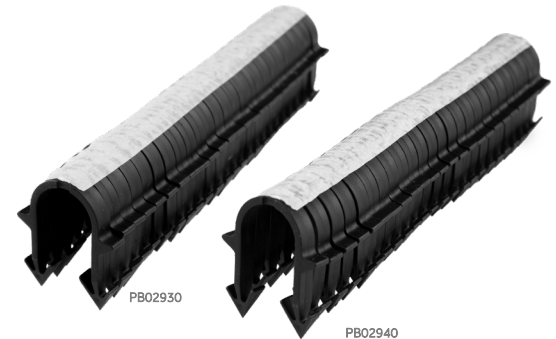
Product Information

Technical Properties:

Polypipe's staples have been specifically designed to enable quick and easy installation. They are supplied in strips of 10 with a contact adhesive/tape to prevent sticking when used with the UFHCH staple gun. The staples are manufactured from 100% recycled plastic to minimise their carbon footprint.

Polypipe's staple accommodates for 15mm, 16mm & 18mm diameter pipe and the barb is designed so that the pipe is firmly fixed to the insulation panel, preventing the underfloor heating pipe from lifting when screeding.

The staples are predominately installed in two patterns serpentine or spiral. Both layouts are perfectly acceptable however, the spiral pattern enables the UFH pipe to be installed at 100mm centres allowing for a more even heat distribution and enhanced heat output (W/m²).



A	B	MAX Ø
40mm	20mm	20mm
60mm	20mm	20mm

Installation Guidance

- Insulation should be installed in accordance with Part 'L' of the building regulations: a suitable layer of thermal insulation must be included within the floor construction. It is the responsibility of the Contractor or Architect to provide guidance on the type of thermal insulation required and ensure compliance.
- The edge expansion strip allows the free expansion of the floor screed. The expansion strip comes with a self-adhesive strip, which enables faster installation. It should be installed around the perimeter wall and around fixed constructions such as columns, steps and access doors.
- The edge expansion features a plastic apron, which lays over the top of the insulation panel to prevent the screed seeping in and lifting the panels. Edge expansion strip should be fitted in addition to perimeter insulation as required by Building Regulations.
- If a liquid screed is being applied, the insulation must be taped and sealed to provide a watertight layer.
- Polypipe ultra-flexible underfloor heating pipework is installed in circuits and secured into the insulation panel with the staples using the Staple Gun.
- 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 screed should be laid over the system to the required depth.