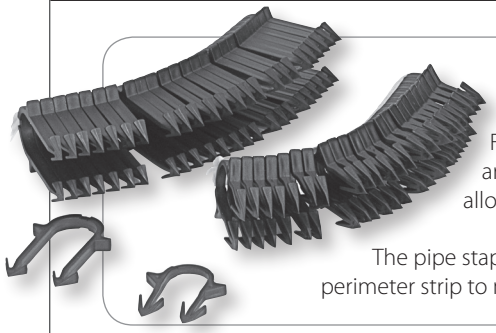
WUNDA

THE BRAND YOU CAN TRUST

Solid Floor Pipe Staple System

✆ 0800 5420 816 | www.wundatrade.co.uk

F02



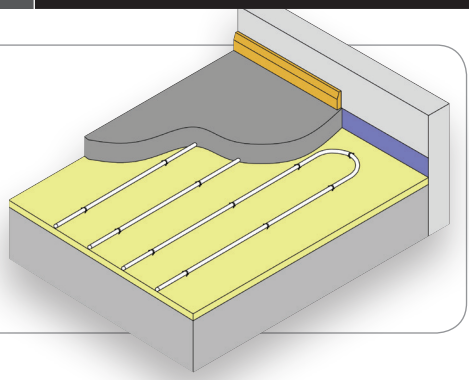
Solid Floor Pipe Staple System

For Underfloor Heating in Screeded or Solid floors using pipe staples that are quick to install using a staple gun or alternatively by hand. Pipe staples allow great flexibility in the way pipe is laid.

The pipe staples are fixed over the pipe onto an insulation board and edged with perimeter strip to maximise system performance.

Suitable for use with:

- Traditional Screed
- Pumped Screed
- Dry Sand & Cement mix
- Chemical Screed
- Concrete

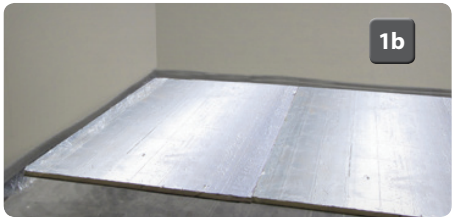


Step by Step instructions

1

1 The Area where pipe and staples are to be laid should be clean, level and free from debris. In accordance with current Building Regulations insulation material should be included in the floor construction, ideally directly below the pipe. This will minimise any downward heat loss and ensure optimum performance. Place the insulation panels directly on the sub floor **(1a/b)**. and cover joins with tape **(1c)**.

Perimeter strip should be installed around all outer walls and fixed items for example stairs and columns. This allows expansion of the floor screed and isolates the screed from the surrounding structures **(1d)**. The pipe is laid flat on the insulation with the polythene skirt laying on top of the insulation.



2 Pipe is fixed to the insulation board using staples simply pushed in by hand **(2a/b)** or alternatively with an optional staple gun **(2c)**.

Revision date: 26-4-2018

Fixing the pipe to the insulation board

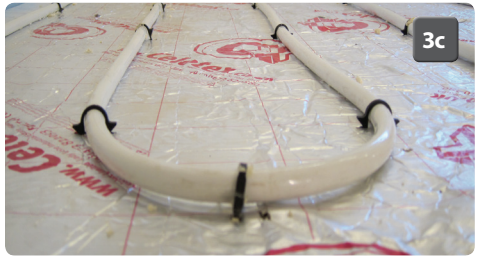
3 First Study the pipe layout (if you have requested them) and familiarise yourself with the design and layout **(3e)**. There can be a variety of designs when laying the pipe.

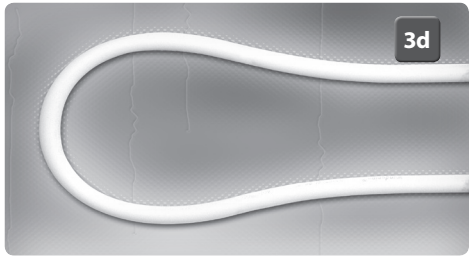
Don't worry if your pipe runs are not straight - it will not affect performance. The heat required relies more on the amount of pipe in the floor than the exact layout of the design.

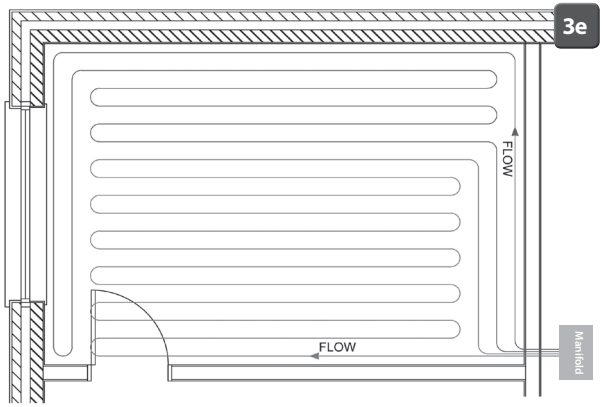
If possible work with two people when laying the pipe; one person rolls out the coil and the other person to push the staples into insulation **(3a)**. Measure the pipe centres and roughly translate the plan onto the floor as shown on the pipework drawing **(3b/c)**.

Be careful not to kink the pipe with a sharp bend. It is not necessary to follow the design of bends exactly. If a sharp bend is likely to kink, it is better to produce a 'light bulb' bend **(3d)**.
The performance will not be affected.

The flow will always go to potential cold spots first - outside walls and windows - the pipe needs to be 100mm from the walls **(3b)**. Use the length of pipe stated on the plan for each individual pipe run. The pipe is marked every metre so you can keep an eye on when to go back to the manifold.





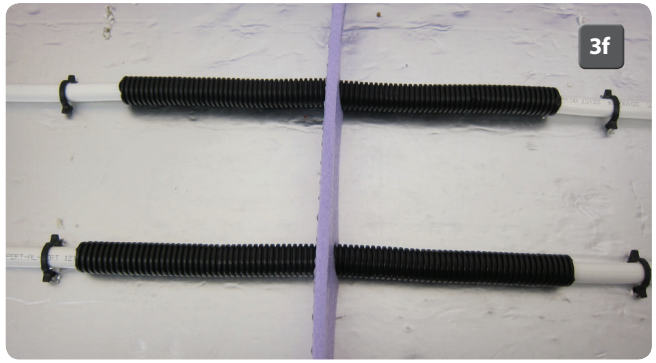


Example - Room with two loops

Plan so that the warmest parts of the loops run along the walls, the loop that is closest to the external wall will deliver more heat than the other loop will, because the local heat losses are greater. It is better for this loop to be the shorter of the two (because the temperature drop along the external loop will be greatest, due to more heat being radiated from the water in this pipe.

Conduit and expansion joints

A 400mm length of pipe conduit should be fitted around pipe work where it passes through internal walls or doorways or whenever any pipe work passes through an expansion joint **(3f)**.
It is recommended that an expansion joint is constructed for every 40m^2 of screeded floor area at a maximum length of 8m. An expansion joint may also be required in long narrow areas such as corridors.
A length of perimeter strip is used to provide the expansion joint.



Revision date: 26-4-2018

Screeding

4 A minimum traditional concrete screed thickness of 65mm should be used for domestic and light commercial use **(4a/b)**. Specialist screeds such as Anhydrite and Polymer modified screeds will vary depending on the construction requirements. This information can be supplied by a specialist screed supplier.

The screed should be allowed to dry naturally and under no circumstances should the underfloor heating system be used to speed up the drying times as this could effect the integrity of the floor. Once the screed has fully dried, heat from the underfloor heating system can be introduced slowly, by raising the flow temperature gradually over a period of a week until the desired temperature is reached (max 45^{0}C).

Technical Information	
Maximum heat output	120-100 W/m2
Recommended flow temperature	45^{0}C*
Maximum loop length	100m (16mm MLC Pipe)
Pipe centres	150 - 350mm (Dependng on specific job)
Staples	45mm or 60mm

Important Information

*Limiting floor surface temperature to a maximum of 27^{0}C. by using floor probes, is essential when using wooden floor finishes. Specialist timber floor suppliers should be contacted to obtain expert advice on your chosen floor finish. The addition of carpet and rugs on wooden floors can increase the temperature between floor and carpet. Make sure the combined tog value of carpet & underlay does not exceed 2.5 tog. Total thickness of any wooden or laminate floor finish should not exceed 25mm.

"When mixed floor solutions are being served from the same manifold, a floor probe must be used in the floor solution with the lower maximum supply temperature. This is to limit the temperature in these floor areas and prevent damage to the floor solution and/or floor finish."

Your notes:

WUNDA

The brand you can trust

For Technical support check out our '**HOW TO**' videos at:

www.wundatrade.co.uk

or call:

✆ 0800 5420 816

Revision date: 26-4-2018