

Selecting the right pipe

At Polypipe Building Products we offer three different types of pipe for use in our underfloor heating systems:

Grey Plumbing and Heating Pipe:

BS 7291 Class S. Manufactured from polybutylene and to the highest possible standard this pipe is suitable for use in both underfloor heating and radiator central heating systems. The pipe also incorporates an oxygen diffusion barrier so as to prevent the ingress of any oxygen in to the system. An added cost saving advantage of using this particular pipe is that any remaining coil lengths or off cuts can also be used for the installation of the domestic hot and cold (potable) water services.

Ultra-Flexible Underfloor Heating Pipe:

BS EN15876. Designed for use in underfloor heating systems only, this ultra-flexible polybutylene barrier pipe lends itself perfectly to systems where ease of handling is essential such as in solid floor pipe staple systems or fit from below installations.

Metal Composite Pipe (MCP):

BS EN21003. For those who prefer a more formable characteristic to lying pipe we have introduced our 16mm MCP pipe range. Manufactured from raised temperature polyethylene (PE-RT) and incorporating an aluminium inner barrier layer this pipe is designed for use in underfloor heating systems only. This pipe has a practical application in rail and staple solid floor type installation.

Metal Composite Pipe installation

Pipe bending radius:

The 16mm x 2mm MCP pipe can be bent easily by hand to the flowing bend radius. $5 \times OD = 80\text{mm}$. If using a pipe spring this radius can be reduced to $4 \times OD = 64\text{mm}$.

Joining:

The 16mm MCP pipe is connected the underfloor heating manifold by the use of 16mm Euro Cone adaptors. In order to make the joint correctly the following procedure should be used.

Step 1:

Cut the pipe at right angles using a suitable pipe cutter.



Step 2:

Use the chamfering tool to de-bur the inner wall of the pipe.



Step 3:

Place the cap nut and split ring over the pipe.



Step 4:

Insert the brass body of the connector into the pipe.



Step 5:

Offer the pipe and connector to the manifold and tighten. Please ensure that the outer and inner walls of the pipe are clean and free from grease deposits or any other contaminants.



Special jointing consideration:

In areas where there is a risk of exposure to aggressive gases such as ammonia or where there is a possibility that excessive moisture will occur it is recommended that any exposed joints be wrapped in a suitable adhesive water proof tape. Please contact the Polypipe Technical helpline for more details.

Storage recommendations:

Special consideration should be given to protecting the pipe when stored in temperatures below -100C as failure to do so could result in damage to the pipe composition. The pipe should also be protected from exposure to UV light. It is recommended that in order to provide adequate protection the pipe is stored indoors and in the original manufacturers packaging.

Clipping of Pipe:

The recommended maximum clipping distances of the pipe is as follows:

Horizontal runs 1.2m apart

Vertical runs 1.5m apart

Underfloor Heating Pipe table of use

Product	Standard	Pipe Dia.	Oxy Barrier	Coil Sizes (m)	Manifold Connection	System Usage	Applications
Grey Plumbing, Heating and Underfloor Heating Pipe	BS 7291 Class S	15mm	Yes	50 80 100 120 150	Push Fit	Solid Floor, Clip Rail, Staple System, DHSP & Fit From Below Systems, Floating Floor System, Overlay™ 15 System	Underfloor Heating, Radiator Systems and Hot & Cold (Potable) Water Installations
Ultra-Flexible Underfloor Heating Pipe	BS EN15876	12mm	Yes	25 50 80	Push Fit	Overlay™ & Overlay™ Lite Systems	Underfloor Heating Only
Ultra-Flexible Underfloor Heating Pipe	BS EN15876	15mm	Yes	50 80 100 120 150	Push Fit	Solid Floor, Clip Rail, Staple System, DHSP & Fit From Below Systems, Floating Floor System, Overlay™ 15 System	Underfloor Heating Only
Ultra-Flexible Underfloor Heating Pipe	BS EN15876	18mm	Yes	120 150 200	Eurocone	Solid Floor, Clip Rail, Floating Floor System	Underfloor Heating Only
Metal Composite Underfloor Heating Pipe	BS EN21003	16mm	Yes	50 80 100 120 150	Eurocone	Solid Floor, Staple and Rail System	Underfloor Heating Only

