

Technical Guidance

Plastic plumbing - pipe support

Question

What are the recommended fixing centres for plastic pipes supplying hot and cold water and central heating services?

Considerations

- Re commended fixing centres for plastic pipes vary according to the diameter of the pipe.
- BS 5955 Part 8 'Specification for the installation of thermoplastic pipes and associated fittings for use in domestic hot and cold services and heating systems in buildings' states fixing centres for plastic pipes where true alignment is required for a neat appearance.
- Temperature increases can reduce the stiffness of the pipe and cause significant expansion and sagging (linear thermal movement of plastic is approximately ten times greater than copper). Fixings must secure and maintain adequate support to the pipe to avoid excessive sagging whilst allowing for thermal movement.
- Sagging of pipes is normally acceptable provided it does not cause them to come into contact with sharp objects, heat sources such as inset lighting, electrical wiring or cause hot and cold pipes to make contact.
- Advice from the Technical Committee of BS 5955 confirms concealed pipes spanning between joists (including timber engineered joists) at up to 600mm centres is acceptable.

Answer

Exposed flexible plastic pipework used for hot and cold water supplies and central heating should be installed at the fixing centres in the table below. Concealed plastic pipes may be supported at greater centres provided the sagging is not excessive. Pipes spanning between joists at up to 600mm centres are normally acceptable for concealed pipework.

Nominal Diameter (mm)	Horizontal runs (mm)	Vertical runs (mm)
10 to 16	300	500
18 to 25	500	800
28 to 32	800	1000