

How to lay a new water supply pipe

This factsheet gives guidance on how to lay a new water supply pipe. It has been developed in line with the Water Supply (Water Fittings) Regulations 1999. Please read it carefully or pass it to your plumber, or whoever is carrying out the work on your supply pipe.



The Water Regulations require installers and customers (user, owner or occupier) to comply with the relevant sections attached to the installation of underground pipework. It is essential to install and maintain water systems adequately and minimise the risk of contamination and avoid the waste of water by the use of suitable fittings and materials in contact with water.

What about my plumber?: The Regulations encourage suitably qualified installers to be accredited as Approved Contractors (Plumbers). An Approved Plumber will provide a certificate stating that the work carried out satisfies the Regulations and we recommend that you ask your plumber about this before agreeing to any work.

Replacing your old pipework: An inspection will be required for any work carried out, except that carried out by an approved contractor. All works must fully comply with the requirements of the Water Supply (Water Fittings) Regulations 1999.

1 Pipe materials: The preferred pipe material is blue MDPE, size 25mm for normal ground conditions. For contaminated ground, other specialist materials must be used.

- United Utilities pipe size is 25mm for MDPE.
- We will consider larger diameter pipes in exceptional circumstances.

2 Ducting: Where a water pipe enters a building or runs underneath a building etc, it must be located inside a suitable duct. The correct size ducting is 100mm (4") diameter pipe. (Usually plastic but can be other materials if suitable.) There must not be any markings for other utilities on the duct, such as gas, electricity, telecom etc.

3 Sealing both ends of the duct: A readily removable seal or sealant should be used at each end of a duct. Do not use oil-based sealant or other sealant that can damage the new water supply pipe. Some builders use a thin layer of sand/cement, but care is needed to avoid contact with the new water pipe. You should contact the supplier of the pipework and sealant before selecting a material for the job. It may be better to use a 'blank cap end' with a purpose made hole with grommet to allow the water pipe to pass through, if this is available.

4 Trenches: These should be lined with sand or selected soft earth, not rubble. They should also be wide enough for the pipework. Please keep a minimum distance of 350mm away from other services such as gas, electricity etc. All of the trench should be available for inspection. Please note that notice

If you need any more information, please call us on:

0845 746 1324

or textphone:

0808 143 0295

Or write to us at:

Lead and common supply pipe scheme

United Utilities

ARC, Haweswater House

Lingley Mere, Warrington, WA5 3LP

is required for us to inspect before trenches are backfilled, if you have not used an approved contractor.

5 Joints on pipes inside ducting: Joints/fittings cannot be used on the new water supply pipe when inside a duct. However joints can be used on pipes in a trench outside of a duct.

6 Insulation: Where a pipe enters a building inside a duct it may need to be insulated (please refer to the information diagrams). Insulation on the new pipe should be water resistant 'closed cell' tubular design of a suitable wall thickness. Once a pipe is inside the property, you do not need to fit insulation unless it is located in an unheated area such as under floors, in loft spaces, or in other areas such as garages or any rooms without heating. However you should be aware that blue mdpe plastic pipe is intended mainly for underground use. If used above ground it can be damaged by exposure to light, and must be covered/insulated etc.

7 Fitting a stop tap at the point of entry to a building: A suitable stop tap (BS 1010) and drain off valve (BS2879) must be fitted, as soon as the pipe enters the building. This must be as close to the point where the pipe enters the building as is possible.

8 Removing the old 'tee piece' or branch from the common supply: When your new supply has been connected, any old branches or tee pieces that used to supply your property must be disconnected. Details of this can be found on our information sheets. It is a requirement of the Water Regulations that this branch removal takes place. Please note that it is illegal to leave such disused branches or 'tee pieces' in place as this can lead to stagnant water contamination which could affect the water supply in the area.

If you suspect the soil in your garden/property is contaminated, then please call us on **0845 746 1324** for further advice about the installation.

Water fittings laid underground

It is essential that pipes entering buildings below ground level are sealed against the entry of fluids, vermin and insects, as diagrams 1, 2 and 3.

Where the incoming pipe:

- has less than 750mm of ground cover or the pipe enters the building at a distance of less than 750mm from the external face of the wall; or
- passes through an airspace below an internal suspended lower floor, the water pipe should be insulated with suitable insulation before being passed through the duct (see 'Important information' items 1,2,4 and 5 and diagrams for details).

Where compliance with the minimum cover of 750mm is impractical, and with the written approval of United Utilities, the water fittings should be installed as deep as is practicable below the finished ground level and be adequately protected against damage from freezing and from any other cause.

Diagram 1:

Vertical pipe in duct greater than 750mm from external face of wall.

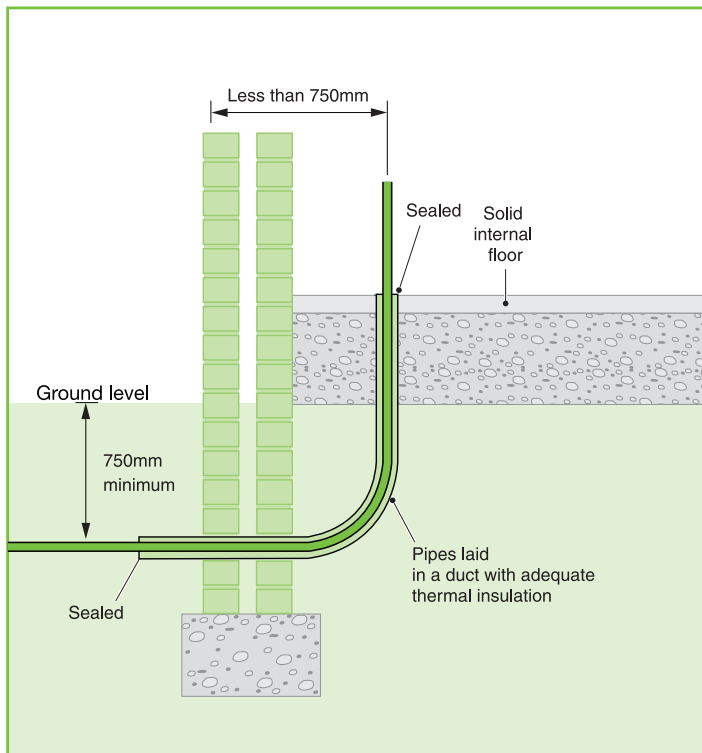


Diagram 2:

Vertical pipe in duct less than 750mm from external face of wall.

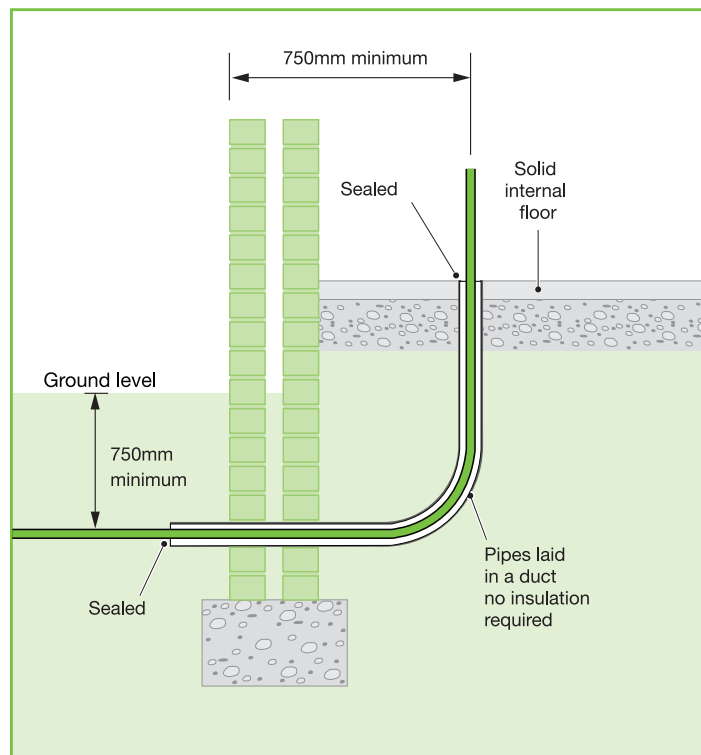
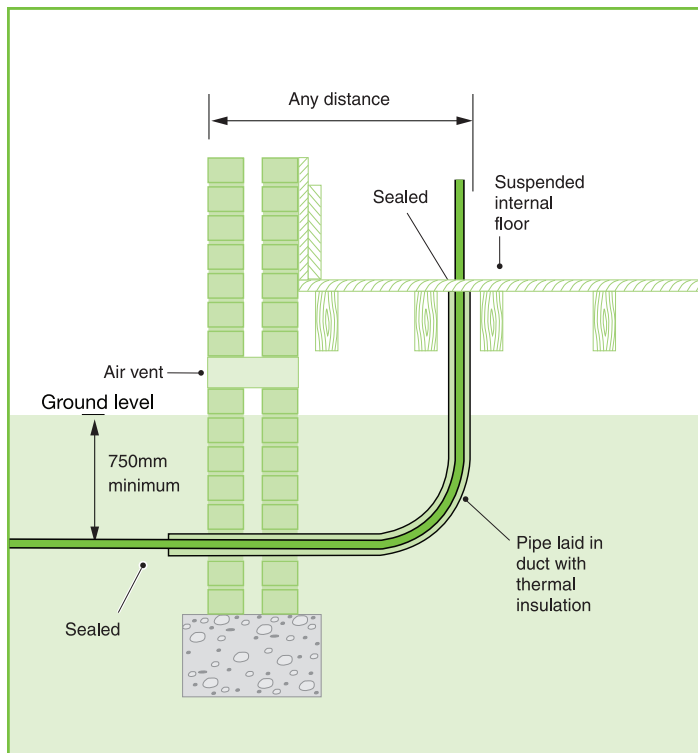


Diagram 3:

Vertical pipe in duct any distance from external face of wall where entry to buildings is through a suspended floor with air void below



Duct sizing

A minimum 100mm duct should be used. However, the duct must accommodate the pipe and insulation as required.

Diagram 4:

Pipes laid over an underground obstruction.

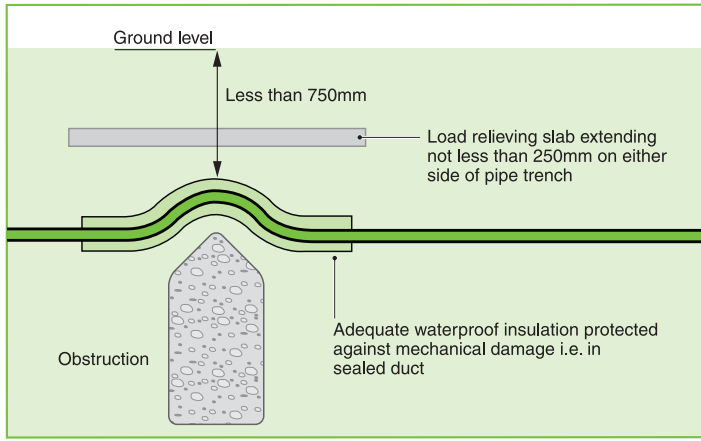


Diagram 5:

Pipes laid under an underground obstruction.

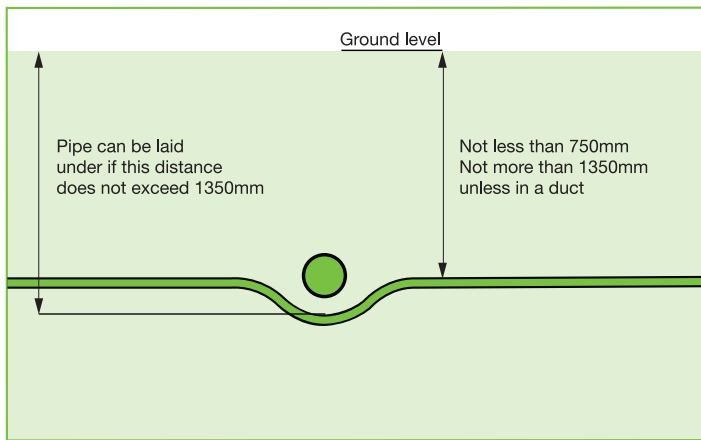
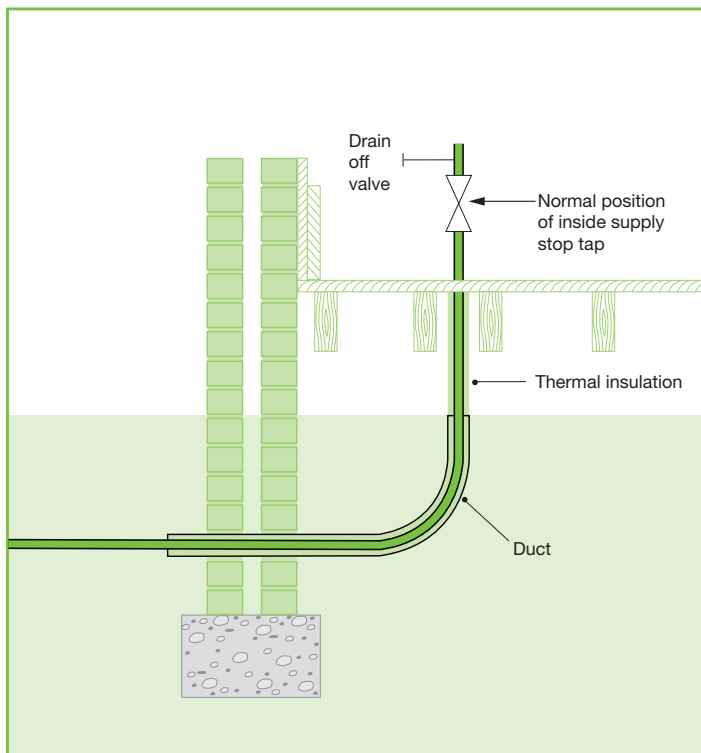


Diagram 6:

Typical arrangement for stop tap and drain off valve.



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