# The Water Supply (Water Fittings) Regulations

### Introduction

The installation of all the pipework and fittings must comply with the Water Supply (Water Fittings) Regulations 1999 (the 'Regulations'). A copy of the Regulations will be enclosed in the application pack.

The Regulations set requirements for the design, installation and maintenance of plumbing systems, water fittings and water using appliances. They are there to prevent waste, misuse, undue consumption, contamination and erroneous measurement of water.

They apply in all types of premises for plumbing systems, water fittings and appliances connected or to be connected to the water supply. They cover underground pipework, including to the service pipe connecting premises to the supplier's water main.

If you ignore the requirements of the water regulations you breach the Regulations and commit a criminal offence, which could lead to prosecution and a fine.

Welsh waters website provides further information (http://www.dwrcymru.com/en/My-Water/Water-Regulations.aspx). Please also refer to the Water Regulations Advisory Scheme 'Water Regulations Guide', which includes the Water Fittings Regulations Clauses as well as Water Supply Industry Recommendations and over 100 colour illustrations which can be obtained from the WRAS website or also through using other contact details below:

### https://www.wras.co.uk/

Unit 13
Willow Road, Pen y Fan Industrial Estate
Crumlin, Gwent
NP11 4EG

Tel: 01495 248 454

Email: info@wras.co.uk

#### **Notification duties**

If you are planning to carry out work on a plumbing system, the Water Supply (Water Fittings) Regulations 1999 require you to notify us and obtain consent for the work before it is carried out.

For premises with an existing connection where an extension of supply is required - the notification application form (and instructions for completion of the form) can be downloaded from the water regulations section of the Welsh Water website (<a href="http://www.dwrcymru.com/en/My-Water/Water-Regulations/Notification-and-Testing.aspx">http://www.dwrcymru.com/en/My-Water-Water-Regulations/Notification-and-Testing.aspx</a>).

You must give prior notice and work must not start unless our consent has been granted. Notification can be made by the owner of the existing premises, or by the designer or builder of proposed installations, but if they have not done so it is the installer ultimately who must obtain consent.

### **Approved Products**

The Regulations requires the use of specific products when making changes to plumbing systems connected or which could be connected to the water supply. WRAS is one of many sources that can provide further information regarding approved products.

### **WaterSafe and Approved Plumbers Schemes**

We support the Watersafe (https://www.watersafe.org.uk/) scheme in our supply area, to ensure best practice in plumbing that meets the requirements of the Regulations, is delivered consistently throughout the UK. The Watersafe scheme is a great way for plumbers to provide assurance to customers that they are accredited and approved by water utilities, and for you to find plumbers who are accredited.

Further information can be found here (http://www.dwrcymru.com/en/My-Water/Water-Regulations.aspx) and we recommend that you enquire on the use of approved plumbers.

#### **Minimum Service Standards**

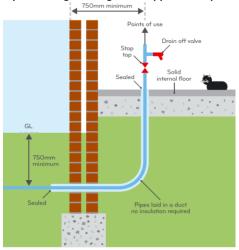
We will supply a minimum pressure of 1 Bar (10 metres head) at a flow of 9 litres per minute at the boundary of the property. Storage requirements for commercial, industrial and agricultural premises will be subject to survey and risk assessment. If you are constructing a property which will be used for business purposes then you are advised to install adequate storage facilities.

### **Service Entry into Premises**

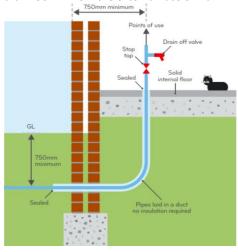
There are a number of ways that service pipes can enter into a building; the following diagrams and descriptions show the requirements.

## **Methods of Service Pipe Entry (domestic)**

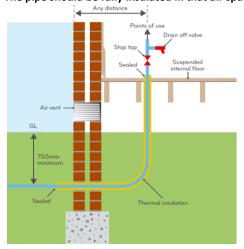
Pipe entering building at the approved depth



Pipe entering building at a distance of less than 750mm from the external face of wall



Pipe entering through a vented or unvented air space (e.g. below an internal suspended lower floor). The pipe should be fully insulated in that air space.



Water supply pipes must only be installed in compliance with the Water supply (Water fittings) Regulations 1999. Please also refer to the Water Supply (Water fittings) Regulations appendix within the "Connecting to a water main document"

**Approved Products** – The regulations require the use of specific products when making changes to plumbing systems connected or which could be connected to the water supply. The WRAS website is one of many useful locations for further information regarding approved products.

**Pipe Material** – External underground pipe should be a MDPE plastic pipe or suitably coated soft copper pipe. If contaminated land identified – use barrier pipe.

**Excavation Depth** – Pipe work should be laid to a minimum depth of 750mm and covered with sand or gravel to protect the pipe.

Entry point to building – The water supply should have a stop tap and drain off valve at skirting level where the pipe enters the building.

**Entry ducting** – The water supply must pass through a suitably sized duct to accommodate the service pipe with insulation.

**Pipe Sealing** – Ensure the ends of pipework are sealed, which can prevent the entry of vermin, fluids and contamination.

**Insulation** – If the pipe enters the building less than 750mm from the external wall of the building then it must be insulated in the duct.

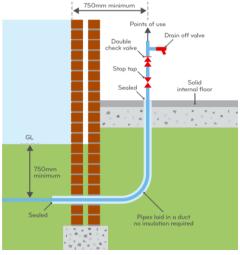
**Inspection** – The new installation must be inspected by Dwr Cymru Welsh Water before the excavation is backfilled and the subsequent connection made in the highway.

No connection will be made until work is approved for connection.

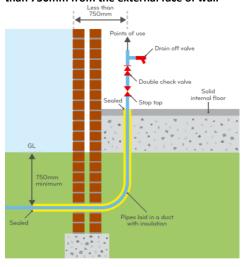
**Highway Excavation** – If it is necessary to excavate the public footpath or highway then permission must be obtained from the local authority before any work is undertaken.

## Methods of service pipe entry (Industrial/commercial)

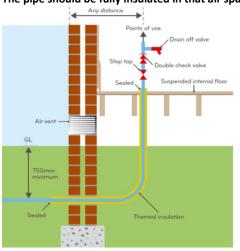
Pipe entering building at the approved depth



Pipe entering building at a distance of less than 750mm from the external face of wall



Pipe entering through a vented or unvented air space (e.g. below an internal suspended lower floor). The pipe should be fully insulated in that air space.



Water supply pipes must only be installed in compliance with the Water supply (Water fittings) Regulations 1999. Please also refer to the Water Supply (Water fittings) Regulations appendix within the Connecting to a water main document.

Approved Products – The regulations require the use of specific products when making changes to plumbing systems connected or which could be connected to the water supply. The WRAS website is one of many useful locations for further information regarding approved products.

**Pipe Material** – External underground pipe should be a MDPE plastic pipe or suitably coated soft copper pipe. If contaminated land identified – use barrier pipe.

**Excavation Depth** – Pipe work should be laid to a minimum depth of 750mm and covered with sand or gravel to protect the pipe.

**Entry point to building** – The water supply should have a stop tap, double check valve and drain off valve at skirting level where the pipe enters the building

**Entry ducting** – The water supply must pass through a suitably sized duct to accommodate the service pipe with insulation.

**Pipe Sealing** – Ensure the ends of pipework are sealed, which can prevent the entry of vermin, fluids and contamination.

**Insulation** – If the pipe enters the building less than 750mm from the external wall of the building then it must be insulated in the duct.

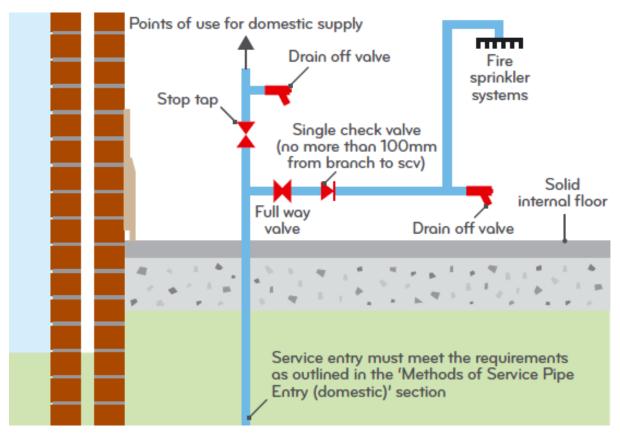
Inspection – The new installation must be inspected by Dwr Cymru Welsh Water before the excavation is backfilled and the subsequent connection made in the highway.

No connection will be made until work is approved for connection.

**Highway Excavation** – If it is necessary to excavate the public footpath or highway then permission must be obtained from the local authority before any work is undertaken.

## **Entry point - Domestic Fire Sprinkler Systems**

The following diagram shows the requirements for fittings at the service entry point which enters a premises. Please note that the single check valve must be located within a maximum of 100mm off the branch connection point of the fire sprinkler supply with the domestic water supply pipework (to prevent backflow or backsiphonage of any stagnant water).



## **Multiple plots**

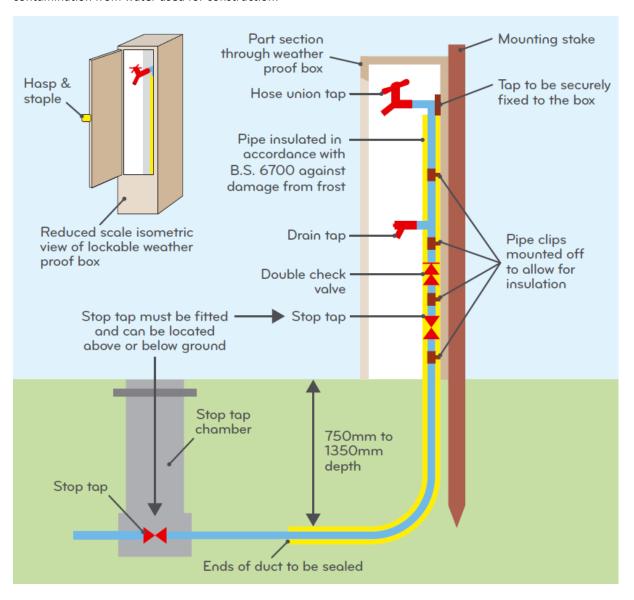
If there are multiple dwellings / plots being applied for connection, each trench / service entry should be clearly marked to identify each dwelling it is serving. If any of the service connections are to be made using manifold systems, they must be requested within the same application and all be ready for connection prior to visit.

### Chlorination

Pipes that are 63mm OD and above need to be chlorinated and follow the process as outlined by developer services for submission of chlorination certificates.

## **Temporary Building Supplies**

A temporary supply must be installed as per the diagram. This accounts for construction purposes, if the supply is to be used for domestic purposes (e.g. suite cabins, canteens etc) this must be protected from potential contamination from water used for construction.



### **Contaminated Land**

Plastic piped must not be laid in the ground that may be subject to spillages of hydrocarbons including petrol, creosote, and oil. In those circumstances barrier pipe systems should be used. The new connection application form requires notification of developments planned on contaminated land sites.

