



**The Water Industry Act 1991 and the Water Supply (Water Fittings) Regulations 1999 set out the responsibilities of water suppliers, of customers and of those who install water fittings or carry out plumbing work. The following notes summarise some of the main provisions.**

### **The water supplier**

It is the duty of the water supplier to supply wholesome water to the premises for domestic purposes. The water suppliers also have the duty to enforce the fittings regulations. They do this by inspecting plumbing systems in new and existing premises for their compliance with the regulations.

### **The customer**

The regulations require the installer and customer (user, owner or occupier) to give the water supplier prior notification of certain proposed installations and to comply with any conditions attached to the water supplier's consent. They must design, install and maintain water systems adequately and minimise the risk of contamination and avoid waste of water by the use of suitable backflow prevention devices and suitable fittings and materials.

### **What about my plumber?**

The regulations encourage suitably qualified installers to be accredited as approved contractors (also known as approved plumbers). An approved plumber will give the customer a certificate stating that the installation work he or she has done satisfies the regulations. In the event of breaches of the regulations in connection with the certified work, the owner, manager or occupier can use the certificate as a legal defence against any resulting prosecution. An approved plumber is permitted to undertake work on extensions or alterations of existing systems without prior consent from the water supplier. When choosing a plumber we recommend you select one that is WIAPS approved (Water Industry Approved Plumber Scheme).

### **The main causes of concern - contamination and waste**

- **Incorrectly installed water fittings and systems and cross-connections with other water sources:** These can lead to the contamination of mains water supplies and can cause waste of water.
- **Disused water fittings and appliances:** These must have the water supplies disconnected back to the last working branch. Failure to do this can lead to water quality problems.
- **Using only approved fittings:** Suppliers are not required by law to sell plumbing fittings that comply with the regulations, but both the installer and user will be responsible if fittings do not comply. Be safe by insisting that your supplier confirms that fittings are of an appropriate quality and standard. They may carry the WRAS approved fitting mark and/or carry the BSI 'kite-mark'.
- **The use of lead solder fittings in contact with drinking water:** This is prohibited. Care should be taken to ensure that only approved solders, marked 'lead free', are used for domestic hot and cold water installations.

- **Lead pipes**

If you have lead pipework between United Utilities' stop cock outside your home and the kitchen tap, consider replacing it with modern materials. If you replace your lead pipework up to the boundary, we will replace the section of the pipe that we own free of charge. We have a dedicated team to deal with this type of enquiry and conditions will normally apply.

If any pipework servicing your property is made of lead and you wish to renew it call us on 0845 746 1324

- **Water quality:**

Problems can also occur when the plumbing system is modified, extended or altered, as water can interact with jointing compounds, fluxes, copper pipes, lead solders, brass fittings and taps etc.

- **Drinking water points:**

In some houses, certain taps may be fed from a storage cistern and not directly from the mains. This can represent a number of hazards and we strongly advise that you ensure that such points are correctly supplied.

- **Submerged inlets to baths and wash hand basins**

Submerged inlets to baths or wash basins in any house are considered a risk and must be protected by the use of a double check valve on the hot and cold water inlets.

- **Shower hoses (see diagram 1 & 2):**

If a shower hose is capable of entering any WC or bidet this would be considered as a higher risk and must be protected by feeding from storage or removing the risk so that the hose cannot enter a WC or bidet.

- **Outside taps**

A double check valve must be fitted to hose union taps in gardens and garages etc. This will prevent dirty water, chemicals, car shampoo etc, from being sucked back into the drinking water supply. On new installations the double check valve must be situated within the envelope of the building away from frost damage. If the existing outside tap was installed before July 1999 then it should have a double check valve installed as above. Alternative devices are available for such taps. You must not connect any irrigation system to these taps without the necessary backflow protection. (see diagram 3).

Diagram 1

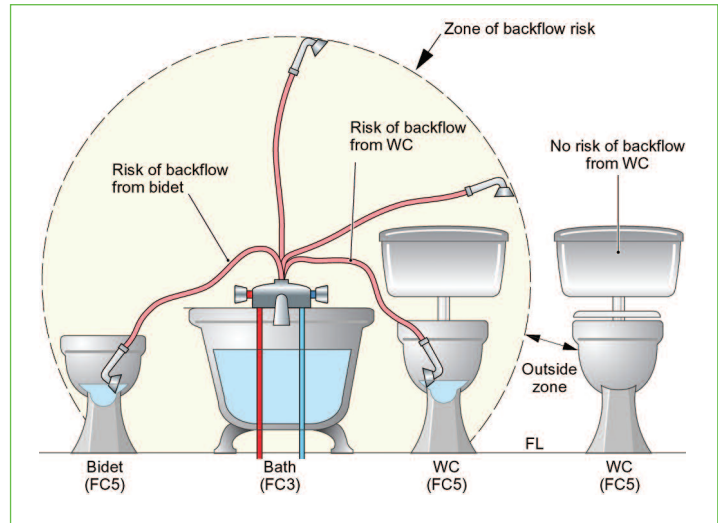


Diagram 2

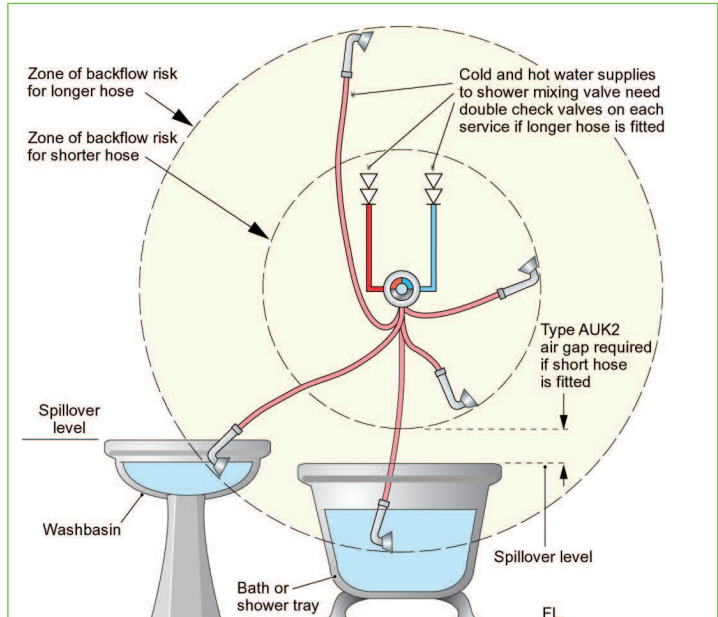
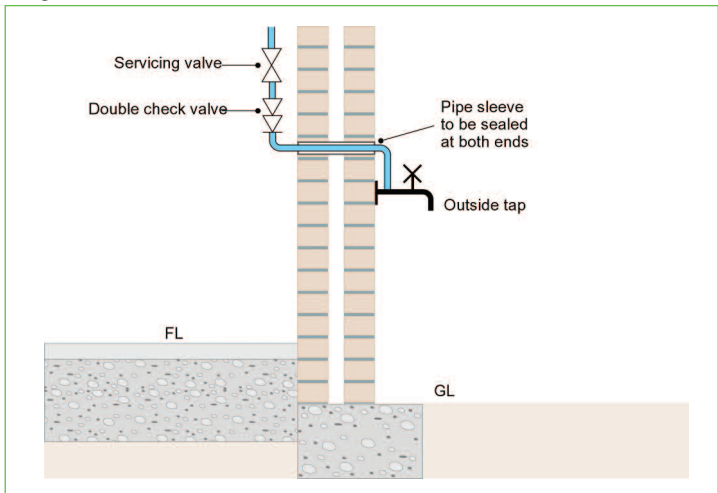


Diagram 3



- **Frost protection**

Insulate pipework in exposed places, for example in lofts or garages. Please note that insulation only delays freezing and only helps retain the very little warmth that is in 'cold' water.

Regular low-level heating is the only effective protection during long, prolonged or very severe periods of cold weather. If your home is left empty and unheated during cold spells, turn off the main stop tap and drain the whole system, including the central heating.

- **Toilets**

The correct type of float operated valves fitted in toilet cisterns prevent disinfectant or bleach being sucked back. Servicing valves have also been required on any new installation since 1 January 1989.

- **Bidets**

Bidets can be a high risk of contamination. Requirements for fitting them are contained in the regulations guide.

- **Storing water safely**

An approved cistern as shown here, reduces the risk of contamination by protecting the stored water from objects falling into the water. It should have warning and overflow connections as appropriate, which are arranged to exclude insects. A rigid, close fitting and securely fixed cover is required, which is not airtight but which excludes light and insects from the cistern. Materials must not shatter or fragment when broken and must not contaminate any water which condenses on the underside. To restrict microbiological growth it is important that stored wholesome water should be kept at as low a temperature as practicable, ideally less than 20°C. Insulation should be provided against heat gain and from frost depending on the ambient conditions.

(see diagram 4).

Diagram 4

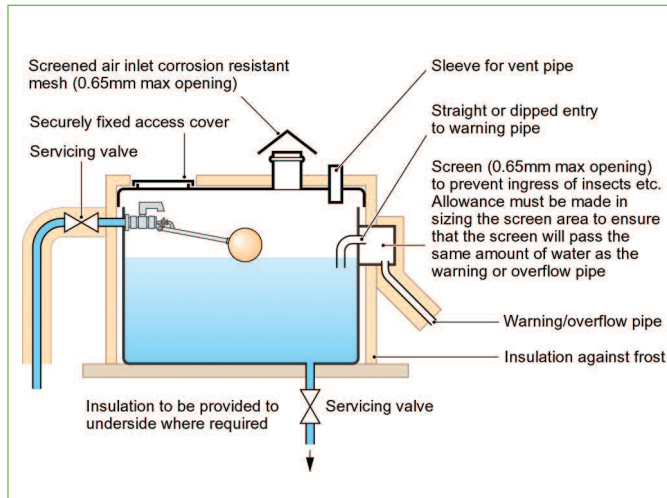
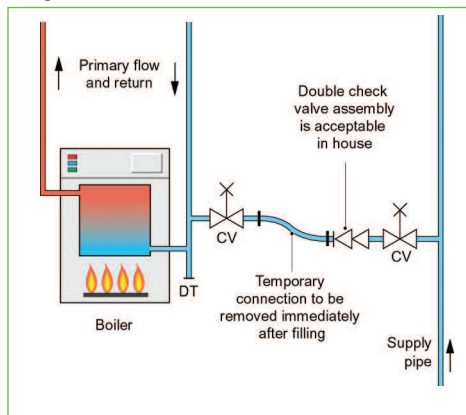


Diagram 5



- **Closed circuits [combi boiler central heating]**

These systems have to be filled initially with water and may require additional 'topping-up' at intervals during use. Some central heating systems may contain additives and the water can be heavily contaminated, therefore they are not to be permanently connected to any supply pipe without an adequate backflow prevention device. (see diagram 5).

- **Saving water**

One of the requirements of the regulations refers to WCs installed since January 2001. The maximum permitted flush volume has been reduced from 7.5 to 6 litres. Dual flush is permitted, using up to two thirds of the volume of the full flush. These changes, together with the introduction of drop valves, flap valves and pressure flushing valves as alternatives to the syphon as flushing devices, offer potential for saving water. WCs must comply with the government's performance specification. Manufacturers, installers and suppliers should be asked to provide evidence of this in the form of a certificate of compliance.

## General information

- Only use approved materials and fittings and use a competent plumber to ensure that the work will comply with the regulations. Some new plumbing fittings, pipework, taps and materials may affect your water quality but this should reduce in time.
- Completely remove any redundant pipework or fittings to avoid creating stagnant water in 'dead legs'.
- Backflow of contaminated water into the mains or to the domestic water supply of premises may be harmful to health. Both the installer and user may be liable if fittings do not comply.
- In most cases we are responsible for the pipework from the main up to the street boundary, and the customer is usually responsible for the rest of the pipework up to the property, including the internal plumbing.
- The fittings regulations apply to all water systems capable of using mains water, including both hot and cold water supply systems, as well as central heating systems.
- Some information shown is reproduced/adapted courtesy of Defra and the Water Regulations Advisory Scheme (WRAS).
- For a full copy of the regulations contact the Water Regulations Advisory Scheme (WRAS)  
Tel: 014595 248 454  
[www.wras.co.uk](http://www.wras.co.uk)

### **This information sheet is for general information and interest only.**

There could be amendments to the regulations and other associated guidance and you should always use the latest version.

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