



A guide to installing your water reuse system: rainwater and greywater

Water reuse systems, rainwater harvesting and greywater systems

All water reuse systems are considered by Anglian Water to be high risk. They contain water which is considered to be a fluid category 5 risk water, which represents a serious health hazard. Should you be intending to install either rainwater harvesting or greywater systems in your new development, there are five key items of information that Anglian Water must be made aware of:

1. Regulation 5

Notification to Anglian Water: It is a legal requirement that Anglian Water must be notified of any proposed installation of a rainwater or greywater system.

2. The mains water back-up supply

The mains water back-up supply to any water reuse system must always be fully protected against the possible risk of backflow. Fluid category 5 backflow protection can only be achieved by the installation of either a type AA or type AB air gap, between the mains water supply and the water reuse system.

3. Wholesite backflow protection

Anglian Water insist that a **double check valve** is fitted on the rising main, at the point of entry to any property that has a reclaimed or recycled system installed.

4. Internal pipework identification

All water reuse system pipework must comply with the colour coding standards set out in BS EN 16941-1:2018 for rainwater and

BS8525-2010 for greywater. These water reuse standards include clear labelling of all points of use and operational valves. Also, any outside taps must be labelled '**NOT DRINKING WATER**'.

Colour coding of the pipework is essential to prevent any future **cross connection** between the drinking water supply and the water reuse system. This is not only a matter of water regulation concern but also a measure contributing to health and safety.

5. External pipework identification

The rainwater supply pipe from the below ground storage to the dwelling **must not be BLUE**. The British Standards clearly state that it **must be BLACK and GREEN**.

Important note: Please remember, if you are intending to install any water reuse systems on your development, Anglian Water must be notified. Our Water Regulations Team can be contacted either by telephone on **0345 60 66 087, option 3**, then **option 3** or by email to **waterregulations@anglianwater.co.uk**



Further advice and recommended methods of installation for these types of systems can be found on our website **www.anglianwater.co.uk/developers**

Water reuse systems

Because your property is planning to use a water reuse system, there is greater risk to water quality.

Before we can make your water connection we'll need to check your water reuse plumbing and fittings have been installed correctly.

This is in addition to your **external pipework check**.

Quick information

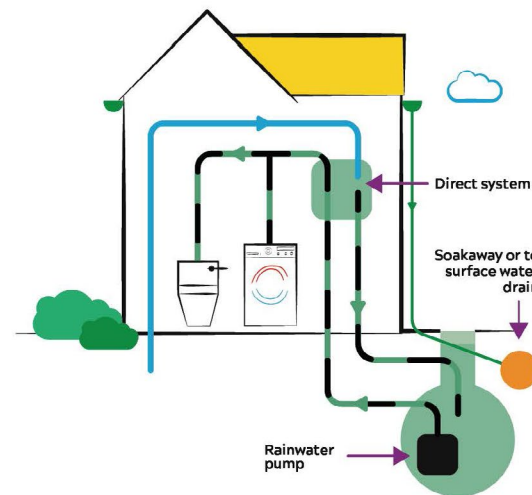


This advice is to ensure you are compliant with Water Regulations.

Please get in touch if you are still unsure so we can give advice and support for your project.

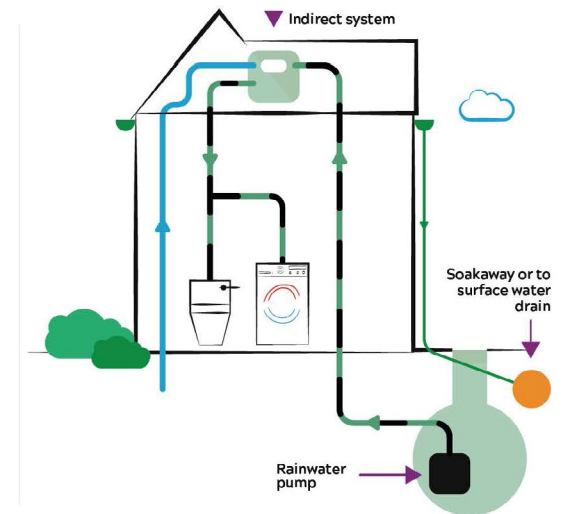
There are 2 types of system designs that are usually used in water reuse systems:

Direct system



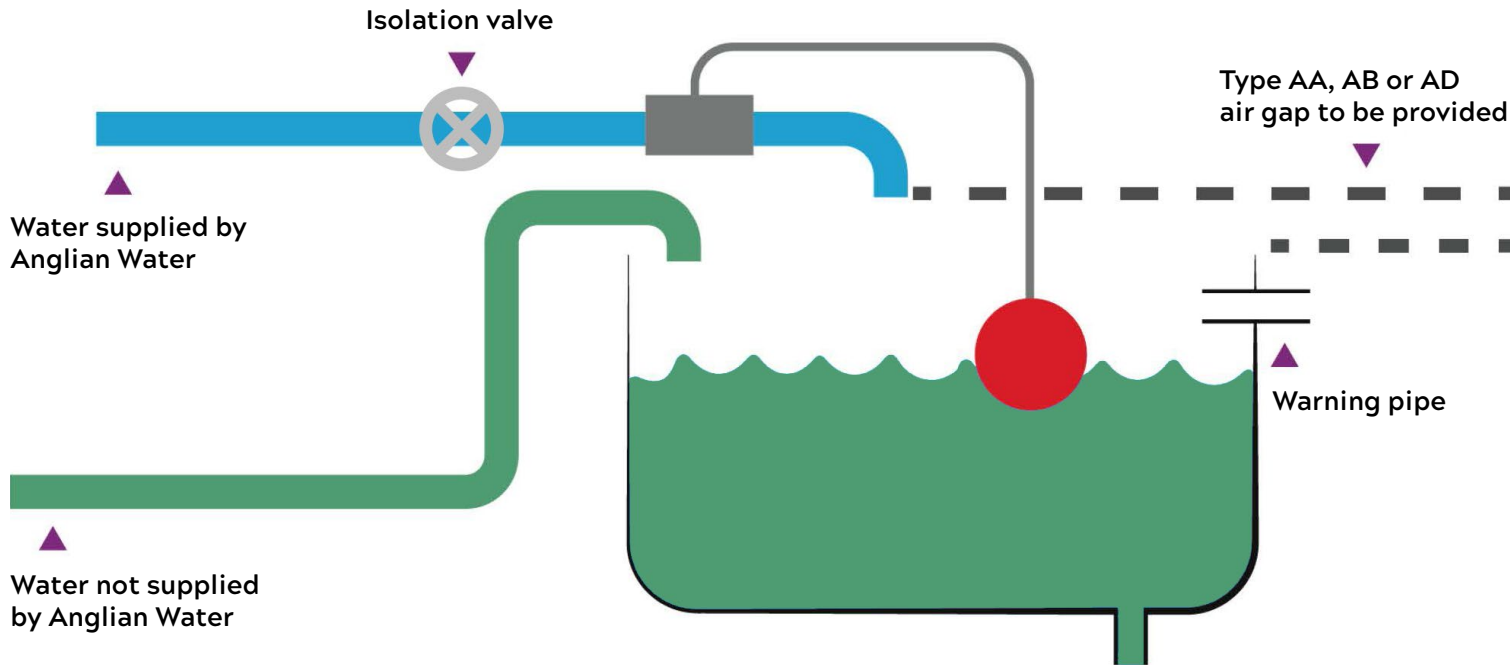
Water is pumped directly from storage such as an underground tank to the points of use such as a toilet.

Indirect system



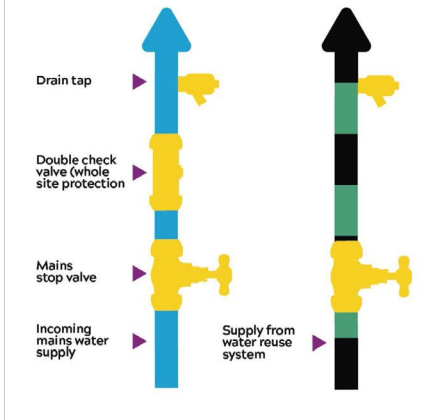
Water is stored and pumped to a high level, for example roof space, where it feeds the points of use by gravity.

More information on indirect systems



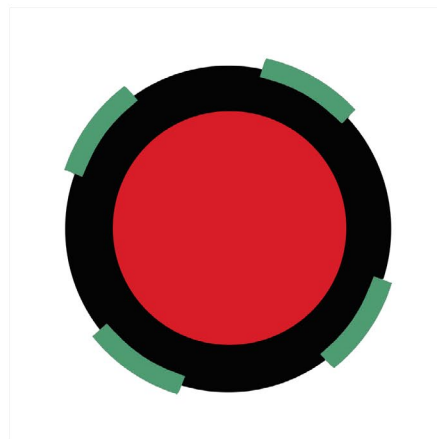
- Systems will need a mains fed back up supply to use when the non-potable water supply is not available/runs out.
- To separate the potable water supply and your water reuse system, a type AA, AB or AD air gap **must** be installed (as shown in the drawing). This provides a suitable backflow protection at the point of supply into the reuse system.
- If the back up supply of water is delivered to below ground storage, a waterless trap may be used to prevent unwanted smells.
- All designs must deliver water quality as per [British Standards Code of Practice](#).

Backflow protection Plumbing



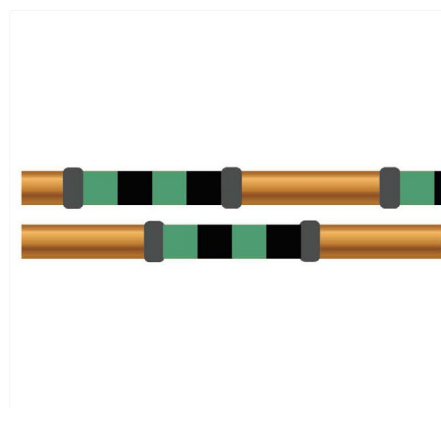
- A double check valve must be installed immediately above the incoming stop valve at the point of entry.

Below ground pipework



- Pipework below ground should be easily identifiable as black and green stripes.
- Specialist suppliers and companies within the UK Rainwater Harvesting Association can provide this type of pipe.

Above ground pipework



- Pipework must be identifiable with black and green markings to prevent confusion with other internal plumbing.
- Insulated pipework must also be identifiable using tape and labels.
- Markings should be along the length of the pipework at intervals, no more than 0.5m.

Labelling



- All taps, valves and key points that supply water reuse systems should be labelled.

For further information

Please contact our water regulations team if you have any other questions about water reuse systems:

Call: **0345 60 66 087** option 4

Email: waterregulations@anglianwater.co.uk

For all other new and replacement supply and general connections quires, please contact:

Call: **0345 60 66 087**

Email: connections@anglianwater.co.uk

