

Keeping stored cold water safe

Checklist

Is the cistern of an appropriate quality and standard, and suitable for installation?

All parts must be corrosion resistant and conform to either the Regulators Specification or a British Standard.

Additionally, all components, and lubricants or sealants used during assembly, must be suitable for use with wholesome water i.e. will not cause contamination should they come into contact with the water as its being delivered to, stored in or discharged from the cistern. This includes any surfaces where a condensate may form.

Is the storage cistern correctly sized?

To ensure it remains wholesome it is important water is stored for as short a period as possible, so correctly sizing the cisterns is critical.

Factors which should be considered when sizing a cistern include occupancy (intended and actual) and usage. Suggestions for storage capacity are given in [BS EN 806-2](#).

Are the inlet and outlet configured to prevent stagnation?

Where practicable all outlets from a storage cistern should be located at the bottom of the cistern, and to encourage mixing and prevent areas of stagnation or 'short circuiting' within the cistern, on the opposite side to the inlet.

Is the temperature correct?

To minimise the risk of contamination resulting from microbial growth (and wastage due to taps left to run) cold water storage and their distribution systems should be designed and installed to maintain a temperature not exceeding 20°C.

To prevent undue warming, it is good practice to insulate both hot and cold water pipework. Unless it is adequately protected water fittings should not be installed where it could be exposed to heat sources, such as other services or sunlight.



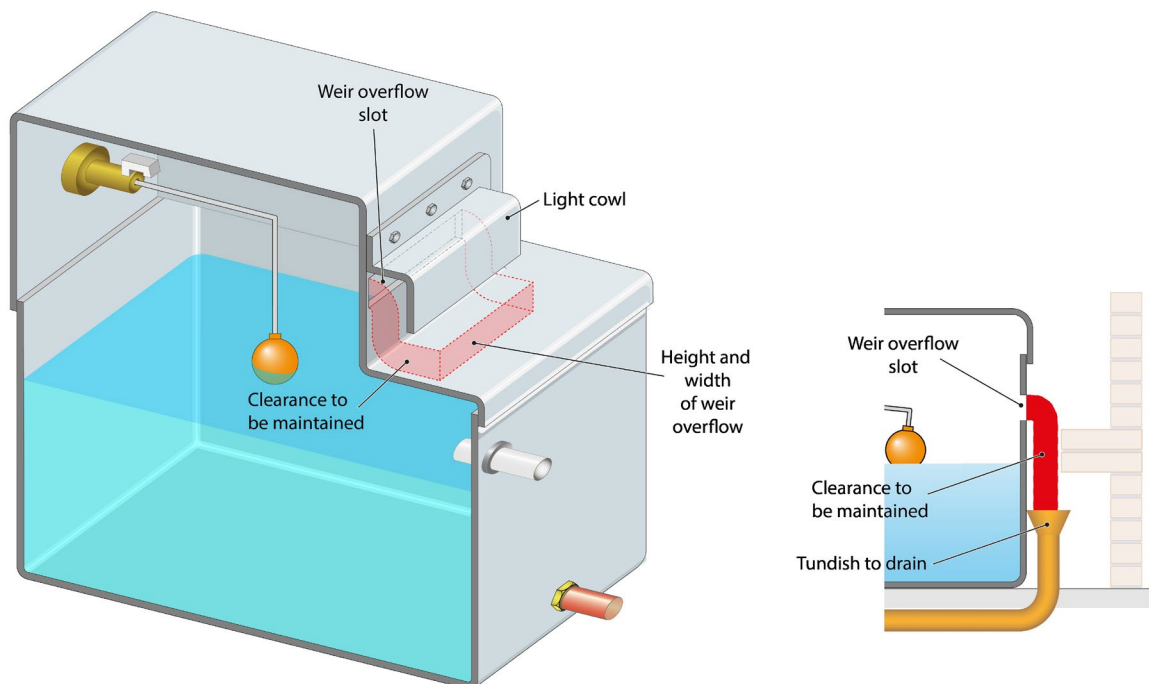
Is backflow protection required?

In any type of premises where a storage cistern is going to supply water which will be used for drinking, bathing, washing, cooking and sanitary purposes (domestic use), although it is required to be wholesome the local water undertakers is likely to require the installation of backflow protection. This is typically achieved by a suitable air gap arrangement but in some circumstances a double check valve may also be required.

If the storage cistern is supplying wholesome water for other types of use the level of backflow required will depend upon what these applications are.

Where a use is categorised as fluid category 5 a [Type AB](#) air is typically used to provide backflow protection. To maintain the wholesomeness of water in these cisterns it is important to minimise any light penetration through the weir overflow as this could promote the growth of algae which could support the growth of bacteria. The most common way of addressing this issue is to fit a cowl or shroud that covers the weir slot without impeding any discharge. Further information can also be found [here](#)

Please note: backflow protection should not be removed without the agreement of the local water undertaker.



Please note other requirements apply refer to the Guidance published by Water Regs UK for further information

<https://www.waterregsuk.co.uk/guidance/>



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