

Upgrading Existing Tanks

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storage ltd



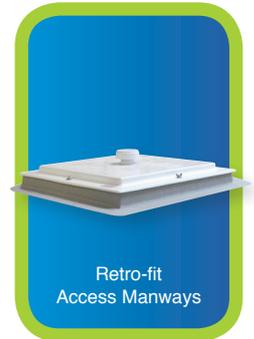
Modern water storage tanks are designed, manufactured and installed to exacting standards which have been set in accordance with the British Standards Institute, WRAS and the HSE amongst other contributing organizations and bodies. However many older tanks which do not meet these standards are still in use and have the potential to provide water which does not meet the required quality standard.

Water storage tanks which were installed prior to the original revision of the water bylaws, which commenced implementation during the 1980's, often fall short of today's high standards.

It is not always necessary to replace older tanks, a range of products and associated services are available to allow tanks to be upgraded resulting in improved water quality and conditions which meet current recommendations and requirements.



Replacement Tank Lids



Retro-fit Access Manways



Screened Vents & Overflows



Retro-fit Float Valve Housings



PVC Flanged Tank Connectors



PVC BSP Female Flanges



Compression Tank Connectors



Aylesbury Float Valves



Equilibrium & BS1212 Float Valves

Some of the specific areas contributing to non compliance are as follows:

Insufficient inspection & maintenance/cleaning of water storage tanks

The Approved Code of Practice for the control of legionella bacteria in water systems requires that all trade or business premises where water is used are required to carry out a suitable & sufficient assessment to identify and access the risk of exposure to legionella bacteria from work activities. All water storage tanks fall within the risk assessment. Any risk must be managed by the implementation & monitoring of a control scheme which when correctly carried out will ensure the best possible water hygiene within the building. Part of this regime is inspection & if necessary cleaning & chlorinating of the tank and associated system(s).

Uninsulated tanks

Lack of, or insufficient insulation to the tank lid, body and associated pipework can result in excessive heat gain, a major contributing factor for the growth legionella bacteria. Freezing temperatures can also lead to frozen pipework resulting in loss of water supply and material damage.

Un-screened connections to the tank

All vents, overflows, warning pipes and similar connections must have a mesh screen (0.65mm max opening) to prevent ingress of insects etc.

Lack of water flow through the tank

The location of inlet & outlet connections is important. A cross flow through the tank needs to be achieved to assist the regular turnover of water throughout the storage period. Poor turnover will result in stagnation within the tank, this condition is normally caused by inlet & outlet connections being positioned on the same face, and/or tanks with an oversize capacity.

Incorrect airgaps

The current water regulations detail specific fluid categories ranging from category 1 – Wholesome water, through to category 5 – fluid representing a serious health hazard. In order to protect the mains supply from the possibility of contamination caused by back siphoning. Depending on the fluid category, an air gap arrangement should be incorporated within the tank. Specific air gap arrangements often not incorporated in older tanks.

Non compliant tank lids

Older tanks often have lids which are ill fitting, not sealed and without means of entering the tank without first removing the lid. Ill fitting lids allow debris, insects and other organic waste to contaminate the stored water. These contaminants aid the build up of sediments which may harbour bacteria and also provide a nutrient source for them. Tank lids should be close fitting and sealed with a screened vent. Tanks having an actual storage capacity of 1000 litres or greater should be fitted with manway access facility to allow inspection of, and entry to the inside of the tank without removing the main lid from the tank.

The Remedy

All of the above detailed conditions can be improved and in most cases the existing tank can be upgraded to allow compliance with current water regulations. This provides a cost effective solution when compared with replacing the tank and/or system. A full range of products and services are available, including:

- Tank cleaning and re-coating, using the most advanced materials.
- The supply of screened vents, overflows and warning pipes which can be fitted on site by the client
- The full upgrade of tanks including fitting insulation, and the manufacture and fitting of new Grp lids
- The supply and fitting of high quality float valves designed to reduce actual storage capacity, reducing the likelihood of stagnation due to over capacity
- The supply and fitting of internal pipework to ensure a cross flow of water within the tank, without the need to alter external pipework
- The supply and fitting of a full range of additional connections and ancillaries as required
- Chlorination of tanks and cooling towers including associated pipework and system equipment
- Purewater also provide a full risk assessment and monitoring services, ensuring that all statutory requirements are being adhered to.