

Executive Summary of the Asset Water Guard System for Commercial Buildings and Shopping Centres

The Asset Water Guard is a combined multi stage filtering and bacteria destruction unit that combines filtering, pressure changes, cavitation and extreme and chaotic turbulence that causes a violent tempestuous movement of water through a specific range of technologies designed to filter to 0.45 microns, remove heavy metals such as iron and manganese, and destroy legionella, other bacteria and pathogens present in the water.

This is supported by flow control valves and flow metres, utilizing a variable speed drive low flow pump to ensure constant pressure on the Asset Water Guard system, complete with chlorination units, pressure relief and check valves, controlled by a PLC unit registering all activity and sending alarms should any part of the system fail.



The Key Benefits of the Asset Water Guard product:

- 1) The system has low running costs and as such is easy on budgets and financial constraints.
- 2) The system has low maintenance costs removing the need to set aside high levels of ongoing maintenance finance.
- 3) The system prevents the build-up of Biofilms by removing Iron, Manganese, various Calcium and organics, which are a prime cause of biofouling in pipes.
- 4) The new system captures heavy metals which have a plus ion charge and removes them through the filter.
- 5) The system destroys incoming bacteria e.g. Legionella, E-Coli, through the filtration to 0.45 micron.
- 6) The system can be custom made or simply upgraded with additional equipment to meet changing needs of sites and legislation.
- 7) Because of the processes used in our system we require a minimal amount of Chlorine residue as the Chlorine does not have to overcome the Biofilm or bacteria. This results in considerable cost savings.
- 8) The system is also designed for return water from buildings for re-processing. This would be ideal in new building construction.
- 9) Static water flows in buildings, particularly warm areas, will be a problem with the old Biofilms and we recommend looking at these on a case by case basis to determine the best solution.

What The Asset Water Guard Means Regarding Water Quality:

These filtration systems will remove impurities including legionella from the water source with certainties as outlined below:

Issue	% Certainty
Virus – no UV	98
Virus – with UV	99.5
Iron	95
Manganese	95
Organics	98
+ Irons	99
Legionella	99.5

Full information on the system is available for your team members, including discussions with our Solari engineer if required.