

## Sediment Cartridge Filters

Sediments are small particles that are carried by water flow and eventually deposit in stagnant water. Sediment filters are the simplest type of filters that remove sediments from water. In a sense, sediment filters can be thought of as small “water strainers.”

The smaller the pore size of the filter medium, the higher the purification level. Because pore sizes are very small, they are usually sized in microns (micrometers). One micron is equivalent to one millionth of a meter. To put this figure in perspective, human hair is typically 75 microns in size and the human eye can see particles down to 40 microns.

Sediment filter media are classified into “nominal” and “absolute” ratings. The former removes 85% of the particles larger than or equal to its size rating, while the latter removes close to 100% of the particles larger than or equal to its pore size. Sediment filters are made of a variety of materials including polypropylene, cotton and glass fibres.

Sediment filters are typically used as prefilters to a finer filtration system, such as a Reverse Osmosis system, although they can be used independently. Unlike activated carbon filters, sediment filters do not remove chlorine, odour or taste from water. For typical residential filtration a 5-micron absolute sediment filter is sufficient to achieve adequate sediment removal. If microbial contamination is suspected in water, it is essential to use at least a *1-micron absolute* rated filter.

New filtration technologies combine sediment and activated carbon filtration in one unit to remove sediment as well as odour, taste and chlorine from water. Depending on water quality and usage, sediment filters need to be replaced frequently.

Sediment filters do not typically carry any third party certification for performance.



Different types of sediment cartridge filters