

CARBON FILTRATION EXPLAINED...THE EASY WAY

Carbon filters are among the most common home water treatment systems because of their relatively low costs. They are most often used to eliminate undesirable tastes and odors, organic compounds, chlorine, herbicides, pesticides, and reduce some metals such as lead. The activated carbon acts like a sponge, trapping and holding contaminants as water passes through it.

REVERSE OSMOSIS EXPLAINED...THE EASY WAY

Reverse Osmosis (RO) is considered one of the most effective and cost-efficient systems to render water to its most purified state. The principal difference between RO and other methods of filtration is in the "**semi-permeable membrane**". A RO membrane has the smallest pores of any filter. Pressure forces water through the membrane, however impurities cannot pass through, only water molecules are allowed through. Unlike conventional filters that trap and store impurities water flushes them away, thus continually cleaning the membrane surface preventing any collection of contaminants. This prolongs its life and reduces maintenance costs. A reservoir is used to store purified water since RO is a very slow process.

Aquamaster filters and membranes have high capacity, are NSF certified, and are designed for ease of use. No tools or disinfectants are needed to change the filters.

WHAT EACH STAGE DOES

Stage 1: **5-micron Sediment Filter** removes particles 15 times smaller than a grain of sand, such as sediment, dirt, sand, silt and rust.
For an average family of four, it should last 1 year.

Stage 2: **Granular Activated Carbon Filter** removes chlorine, tastes and odors. It will process (AMR4000 only) 2500 gallons, but needs to be replaced after a year.

Stage 3: **TFC Reverse Osmosis Membrane** removes virtually all metals, chemical contaminants and additives (including fluoride and sodium).

TFC membrane (AMR4000)	vs.	CTA membrane (AMR3000)
◆ Rejects a higher percentage of contaminants (95-99%)		◆ Rejects 60-99% of most contaminants
◆ Higher capacity – 36 gallons per day		◆ 18 gallons per day
◆ Last longer - up to 5 years		◆ 1-2 years
◆ Chlorinated or non-chlorinated water supplies		◆ Chlorinated water supplies only.

Holding Stage: Since the water flow through the membrane is slow, the water is accumulated in a 3.2 gallon reservoir on AMR4000 (2.4 on AMR3000) to provide a continuous flow through the tap.

Stage 4: **Polishing Carbon Filter** gives the final touch for perfect tasting water. It will process 2500 gallons, and should last over a year.