

Crusader 1.25" Enhanced

The Crusader 1.25" Enhanced Water Filtration Series is designed to address hardness, heavy metals, pesticides, herbicides, and chlorine tastes & odors in microbiologically safe water at flow rates up to 28 gpm.

Operation of the Filtration System

Hard water can contain dissolved minerals in the form of Calcium (Ca), Magnesium (Mg), and metals such as Iron (Fe), Copper (Cu), Lead (Pb), Nickel (Ni), Zinc (Zn), Lithium (Li) and other inorganics. Chemical Pesticides, Herbicides, Chlorine, & Chloramine with their disinfectant byproducts can also be found in safe city water. Reduction of these contaminants is accomplished by conditioning & filtering the water through a sophisticated ion-exchange process as well as catalysis, absorption, adsorption, and physical filtration.

Filtration Media - AquaPro 500-3a, ChlorZorb, & Catalytic Activator

The exchange media is a high quality, FDA certified, commercial-grade strong acid cation Functional Matrix filtration media with a very high whole bead count and no color throw. It is physically hard and is extremely resistant to chlorine oxidation, fouling, and attrition. 500-4 filtration media is designed to work together with ProGuard & ProGuard Plus performance enhancers to synergistically function at peak efficiency levels and provide you with the water quality, taste, & feel that you desire. The media combines high operating capacity with excellent chemical and physical stability to ensure a long, dependable life. ChlorZorb & the catalytic activator work together in synergy to effectively address chlorine, chloramine, pesticides, herbicides, tastes, odors, and disinfection byproducts. These media are further activated by ProGuard & ProGuard Plus, which maintains a bacteriostatic environment.

Controller/Meter

Regeneration of the system is initiated by a sophisticated electronic control timer, which precisely meters filtered water flow and makes decisions to regenerate based on measured water consumption, elapsed time, and other program settings.

Regeneration & Control Valve

A fully programmable microprocessor controls Tank Fill, Percolation, Backwash, Ion Displacement, Backwash, Vortex Rinse, and Return-to-Service cycles. This ensures that water quality meets specifications. A hydraulically balanced, self-cleaning piston utilizes a composite drivetrain and high-resolution optical encoder. All parts in the waterway are either coated brass or composite Noryl® materials to ensure long and reliable service life.

Media Tank

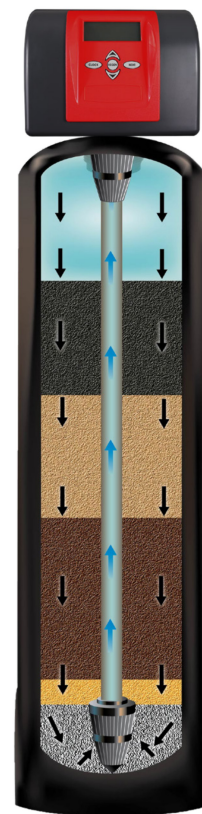
All models feature a non-corrosive fiberglass media tank with a one-piece thermoplastic inner liner. The tanks are approved by NSF, UL, and the FDA. They also meet WQA Standard S-100, and all fiberglass tanks carry a limited lifetime warranty.

Brine Tank & Brine System

The high capacity brine tank is a combination brine maker and salt storage vessel and is made of tough, high-density polyethylene. Larger tanks are available for extra salt storage capacity, if required. Brine refill is automatically controlled by the computer to provide the exact amount of brine required for each regeneration cycle. The Brine System has a float and safety valve shut-off, which minimizes the chance of overflowing the brine tank. All units are equipped with an air check.

ProGuard

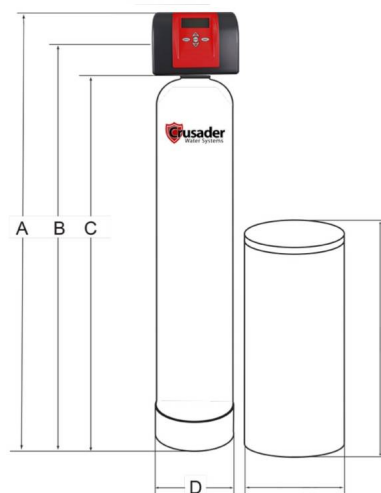
A high efficiency ProGuard reservoir is included with this system to ensure peak performance, maximize efficiency, and provide the highest level of protection from inorganic metals and minerals.



Crusader 1.25" Enhanced Water Softener & Filter



Maximum Piping Size - 1.25"
Water Temperature - 40 - 80°F
Water Pressure - 40 - 80 psi



Crusader 1.25" Enhanced Water System

	CS-E-35HF	CS-E-50HF	CS-E-72HF	CS-E-96HF	CS-E-130HF
Maximum Capacity (Grains-CaCo3)	35,000	50,000	72,000	96,000	130,000
Default Capacity (Grains-CaCo3)*	28,400	42,600	56,800	85,200	113,600
High Efficiency Capacity (Grains-CaCo3)	22,000	33,000	44,000	66,000	88,000
Maximum Salt Used Per Cleaning (lbs)	15	22	30	45	60
Default Salt Used Per Cleaning (lbs)	9	14	18	27	36
High Efficiency Salt Used Per Cleaning (lbs)	6	9	12	18	24
Peak Flow Rate (gpm) @ 75 psi inlet 25 psi drop	30	30	32	35	38
Service Flow Rate (gpm) @ 55 psi inlet 15 psi drop	25	25	27	30	33
Dimension A - Overall System Height	62"	62"	62"	73"	73"
Dimension B - System Piping Height	56.09"	56.09"	56.09"	67.09"	67.09"
Dimension C - Pressure Vessel Height	54"	54"	54"	65"	65"
Dimension D ■ Pressure Vessel Diameter	10"	13"	13"	16"	18"
Brine Tank Dimensions (L x W x H) (Inches)	14 x 14 x 34	15x 17x36	18x40	18x40	24x50
Total Space Required (L x W x H) (Inches)	14x25x62	14 x 25 x 62	18 x 32 x 60	18x35x62	24 x 44 x 73
Shipping Weight (lbs)	115	145	215	270	375

*Factory Settings