

The Klear-Flo II System

The **Klear-Flo II Water Treatment System** reduces undesirable iron, sulfur, turbidity, and corrosive levels from water supplies without the use of harmful chemicals. The **Klear-Flo II** operates on two basic principles that occur in nature. The first being oxidation which is a reaction between the oxygen in the air we breathe and dissolved minerals found in most ground water supplies. When the oxygen component of air is induced into water it reacts with iron, sulfur, and manganese to form particles, or oxides. The second principle, filtration, uses a variety of layered inert granular media to both reduce the water's acidity and filter out the precipitated oxides. As water passes through the system it is constantly being aerated and filtered. The filtered water, still rich in dissolved oxygen, leaves the system virtually free of iron and sulfur and appears slightly cloudy when initially dispensed. The excess oxygen is responsible for the temporary cloudy appearance. Within seconds after dispensing, the water will begin to clear from the bottom up as the oxygen is released. Clear, odor-free, iron-free, and pH-neutral water is provided at every turn of the tap. A water softener can be installed after the **Klear-Flo II** treatment system to remove calcium and magnesium hardness.

After treating several hundred gallons of water, the granular filter media in both treatment vessels require cleaning. Each treatment vessel automatically backwashes in succession until all trapped oxides are flushed out to the drain. In addition, a new charge of air is introduced into the Oxidizer Vessel. The system can treat water as long as sufficient air is present to sustain the oxidation process. The frequency of backwash and air charging is dependent on water usage and the size of the installed **Klear-Flo II** water treatment system.



Features

- No Chemicals Needed
- Extremely Easy to Sanitize
- No Floats or Air Volume Controls Needed
- Oxidation Tank Doubles as Pre-Filter
- Elevates pH
- Oxidation Tank Backwashes
- No Pumps or Compressors
- Replacement pH Media Fill Port

Specifications

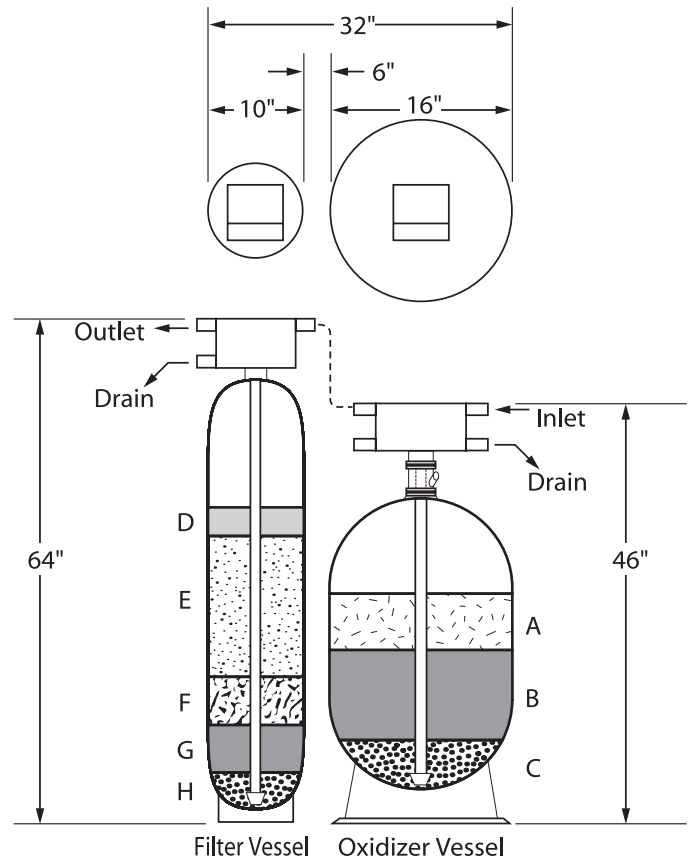
MODEL NO.	MAXIMUM SERVICE FLOW RATE	MAXIMUM BACKWASH FLOW RATE	TREATED WATER PER RECHARGE	PIPE SIZE	MAXIMUM IRON	MAXIMUM TANNINS	MAXIMUM SULFIDE	MAXIMUM MANGANESE	pH OPERATING RANGE	OXIDIZER SYSTEM (dia. × ht.)	FILTER SYSTEM (dia. × ht.)	FLOOR SPACE (lgth × depth)
	(gpm)	(gpm)	(gallons)	(inches)	(ppm)	(ppm)	(ppm)	(ppm)		(inches)	(inches)	(inches)
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(7)	(8)	(8)	(8)
Klear-Flow II	5	7	1,000	1"	10	0.2	10	2	6.0–8.0	16" × 46"	10" × 64"	32" × 16"

Klear-Flo II Features

- Raw water hardness will not be altered by this filter. A water softener installed after this filter system is recommended for removal of hardness.
- Pressure loss not to exceed 15 psi with clean filter.
- Recharge frequency is adjustable—1, 2, 3, 4, 6, or 12 times per 12-day interval.
- Pipe connection size on filter. Minimum pipe size required for proper operation— $\frac{3}{4}$ ".
- Tannin levels above 0.2 ppm interfere with Iron, Manganese, and Sulfide reduction. Chlorine feed required to remove tannins.
- Sulfide odors caused by sulfate-reducing bacteria in the hot water heater will not be treated by this filter.
- Raw water pH below 6.0 requires pre-treatment to elevate pH for satisfactory Manganese reduction.
- The product is comprised of two vessels, Oxidizer and Filter, each having different dimensions.

The minimum floor space length is based on 6 inches between the Oxidizer and Filter systems.

The Oxidizer and Filter systems can be separated by any desired distance but must be piped in series.



Klear-Flo II Media

- A Several hundred free-floating baffles that allow the water to cascade through the head of air.
- B pH elevator to lessen corrosivity of the water and also accelerate the oxidation/filtration process.
- C Support media to assure even distribution of the water leaving oxidizer tank.
- D–H Various sizes and weights of filtration media to remove particulate matter greater than 5 microns in size.