

A Greensand filter removes iron and manganese from your water.

## Greensand Filter with Fleck valve

- Natural polyglass media tank allows easy viewing of media performance during system cycles
- 1.05 distributor tube minimizing pressure loss
- High flow distributor screen
- 10 x 16 potassium feeder tank
- 316 stainless steel bypass isolation valve
- Iron and manganese removal

## 5600 Control Valve Features

- 12-day electromechanical timer allows maximum selection for backwash frequency
- Ruggedly built timer is designed with heavy-duty 3/8" wide plastic gears
- Injector/drain modules containing the brine valve, flow controls, and injector are removable from the valve exterior
- Chemical resistant PVC injector nozzle and throat
- Non-corrosive, UV-resistant Noryl® valve body
- Economical; small annual power consumption, keeps the time and activates the piston/valve mechanics with a single motor
- Designed with double backwash









## Do I Need a Greensand Filter?

Symptoms will vary depending on the amount of iron and manganese in your water but good indications you need a Greensand filter are rust/iron or black stains on fixtures, tubs, sinks and laundry. Our Greensand filter removes iron and manganese from your water. It runs on kinetic energy from the natural flow of your water.

Greensand is an organic fertilizer that contains the deposits that were once part of the ocean floor. It is a bluish-green color, and is also called "glauconite". The glauconite is first stabilized then coated with manganese oxide. This coating provides the glauconite with its special chemical oxidation-reduction properties for the removal of iron and manganese.

## **How Does a Greensand Filter Work?**

- 1. Iron and manganese are metals often found dissolved in water. They cause stains when exposed to air in the laundry, bath, etc. by oxidizing or "rusting." The greensand filter media oxidizes dissolved iron and manganese on contact, as the water flows through the greensand filter, and causes these elements to precipitate (or form solids) in the bed of the filter.
  - To provide the oxidizing power to precipitate these metals, the filter is automatically cleaned and restored with potassium permanganate (a purple liquid) during each backwash cycle. Potassium permanganate is a powerful oxidizer, similar to chlorine.
- 2. The iron filter backwashes these small particles to a drain every few days in the middle of the night (or some other preset time), thereby cleaning and restoring the filter media.
  - No permanganate is added to the filtered water. The permanganate is only used to backwash and clean the greensand filter media. A special double rinse makes sure the filter bed is free of any permanganate residual. The manganese greensand process is used to effectively remove iron and manganese from water.