

EAFE IRON Filters

Ferrous Iron (Clear Water Iron) Removal



Iron

Iron is a common element found in most water supplies, particularly well water. In concentrations over 0.3 mg/L (ppm) iron causes deposits on pipelines, pressure tanks, water heaters and water softeners, reducing the available water flow and pressure. It affects the flavour and colour of food and water. It may react with tannins in coffee, tea and some alcoholic beverages to produce a black sludge, which affects both taste and appearance. Iron causes reddish-brown staining of laundry, porcelain, dishes, utensils and even glassware.



Removing Iron from Whole House

Rainfresh EAFE Iron Filters are based on the technology of oxidation and filtration. They utilize atmospheric oxygen to oxidize the dissolved iron (ferrous) to a filterable form (ferric). A special oxidant medium (BIRM®) acts as an insoluble catalyst and enhances the oxidation process. The resulting precipitated iron (ferric hydroxide) is filtered within the system and iron-free water comes out of the system for use.

After a pre-set number of days (typically every 3-4 days), the filter automatically undergoes a backwash cycle, during which it cleans the bed up and discharges the trapped iron to drain. The system does not need any regeneration by chemicals or salt and is, therefore, very economical to use and environment-friendly.



Oxygen is introduced into the system by installing a venturi (air-injector) ahead of the pressure tank. When the well pump is on, the air-injector sucks in air and stops when the pump shuts off. The air contact tank included with the system provides sufficient contact time between oxygen and the water to facilitate better iron reduction efficiency.

ADVANTAGES

- Prevents Red Stains
- Whole House Treatment
- No salt or chemicals
- Environment Friendly !
- Virtually Maintenance Free !

Advantages

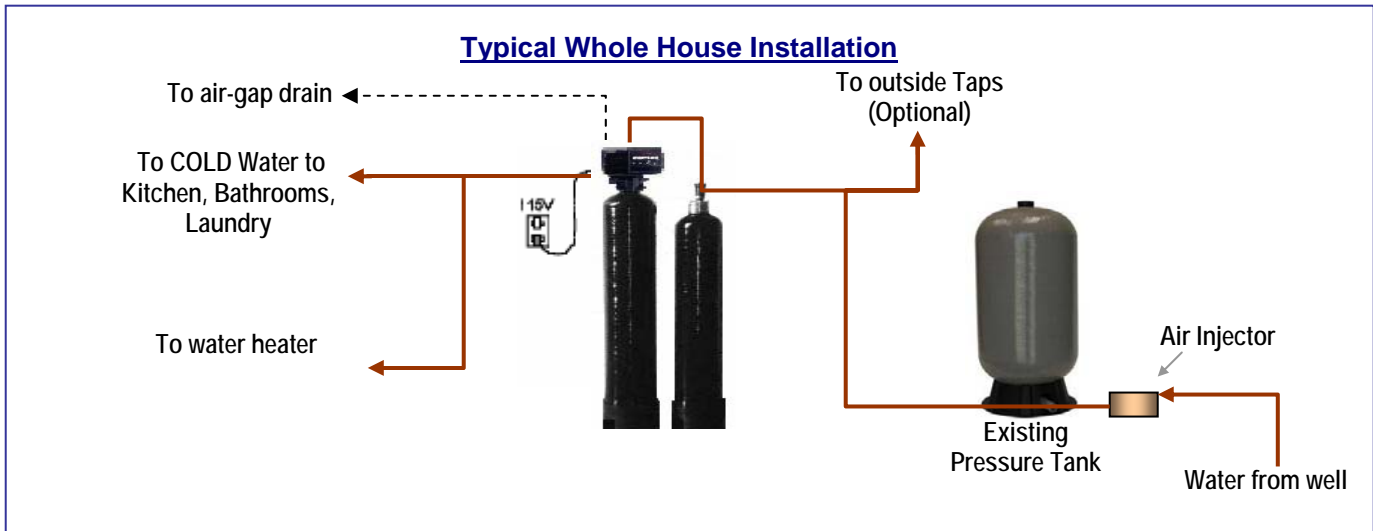
- Removes iron from whole house water supply
- No use of salt or chemicals
- Fully automatic metered backwash
- Prevents iron staining on bathroom & kitchen fixtures, washing machines, dishwashers, showers, laundry, etc
- Clearer water at every tap including showers

Manganese Reduction

Envirogard EAFE systems can, in some cases, may also be used to remove some manganese from water with the same dependability as iron removal. However, for manganese removal, pH of the water should be between 8.0 and 9.0 for best results.



Iron-free water for the entire home – The NO MAINTENANCE system



MODEL Specifications

Model No.	Rate Service Flow US GPM*	Max Flow Rate US GPM*	Backwash Flow Rate Required US GPM*	Inlet / Outlet	Drain Connection
EAFE 948	2.5 (9.4 lpm)	4.5 (17 lpm)	4.0 (15 lpm)	3/4" Male NPT	1/2" Hose
EAFE 1054	3.0 (11.3 lpm)	5.5 (20.8 lpm)	5.0 (18.9 lpm)	3/4" Male NPT	1/2" Hose
EAFE 1252	5.0 (18.9 lpm)	10.0 (37.8 lpm)	8.0 (30.2 lpm)	1" Male NPT	1/2" Hose

* - 1 US Gallon = 0.8327 Imperial gallon

Conditions for operation

- Alkalinity should be greater than two times the combined sulfate and chloride concentration
- Max water temperature: 38°C (100°F)
- Water pH range : 6.8 to 9.0
- Hydrogen sulfide should be removed prior to the EAFE system.
- Oil: None present.
- Polyphosphates: None present
- Free chlorine concentration less than 0.5 ppm

All models are equipped with by-pass valve, drain line connections and automatic electronic timer control valve. Call Rainfresh for custom sizes and options.

ABOUT RAINFRESH/ENVIROGARD

For over 50 years, Envirogard has been leading the water treatment industry in Canada by providing high quality products and solutions at affordable prices. "Rainfresh" products are used by homeowners across Canada and in over 40 countries worldwide.



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