VERTEX Water Softeners

Eliminate limescale, soapcurd, and reduces Soap/ Detergent use up to 70%

1054M Side by Side Model

1035CSE compact cabinet unit

- Ion exchange for hardness mineral removal.
- Uses Purolite 40-70 mesh resin for low salt use and minimum brine discharge.
- Metered demand regeneration meets California requirements.
- 3 sizes for most home requirements. 1.0, 1.5, 2.0 cu. ft. resin capacity.
- Side by side 2-tank system - or compact cabinet configuration.
- Proven Fleck valve provides reliable control.

Fleck 7000SE
Simple Electronic Controller

Fleck 5600M
Mechanical Controller

VERTEX Water Products

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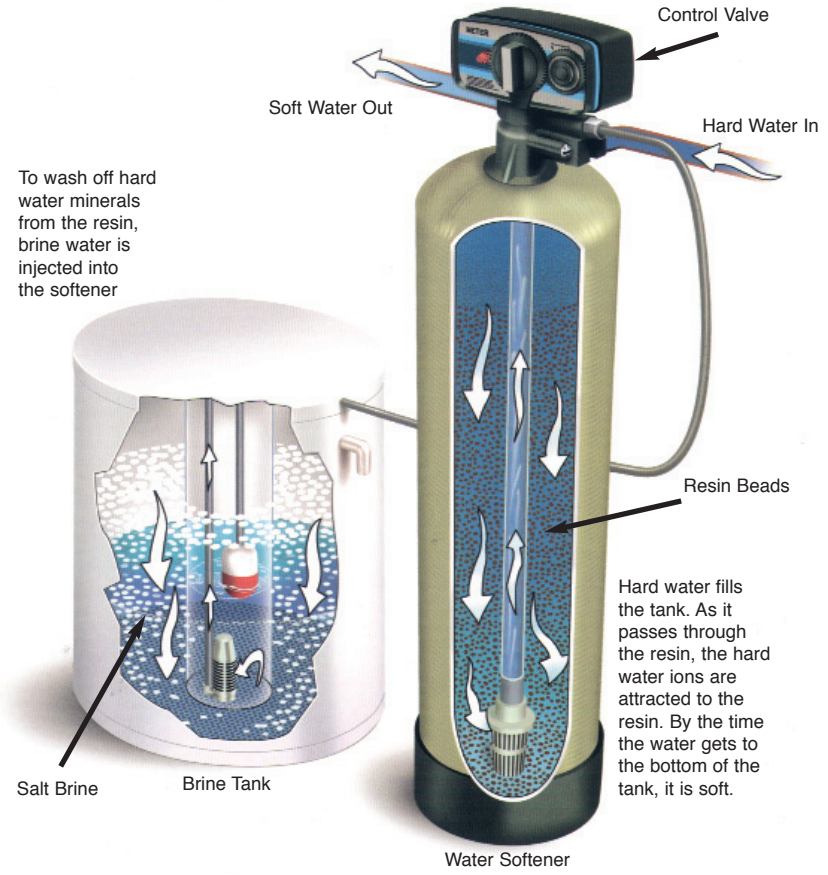
(Call for confidential price list.)

VERTEX
Ion Exchange Water Softeners

How does a water softener work?



Softening is a 4-Step Process

1. The water softener tank is filled with small diameter resin beads which are covered with sodium ions. When hard water flows through the resin bed, the beads act like a magnet, attracting the calcium and magnesium ions in the water in exchange for the sodium ions.

2. Eventually the resin beads become saturated with the hardness mineral ions and must be 'recharged". This regeneration process is conducted by the control valve on the top of the tank. The control valve is the brain of the system.

3. During regeneration, a strong brine solution from the brine tank is flushed through the resin tank, bathing the resin beads in a stream of sodium ions from the salt in the brine. This replaces the calcium and magnesium ions captured by the resin beads.

4. The brine solution carrying the displaced hardness minerals is flushed to the drain with fresh water. The resin beads can be used over again.

Softener Specifications

Model Number	948M	1054M	1252SE	1035CSE
Applications	small homes apts, condos	average home	luxury homes	for limited space
Nominal Resin Capacity	1.0 Cu. Ft.	1.5 cu. Ft.	2.0 Cu. Ft.	1.0 Cu. Ft.
Nominal System Flow @50 psi, 15 psig drop	11.6 gpm	11.6 gpm	19.7 gpm	9.5 gpm
Hardness Removal - grains	30,000	45,000	60,000	30,000
Softener Tank SIze	9"dia. x 48" high	10"dia. x 54"high*	12"dia. x 52" high	12" w. x 21" d. x 45" h (cabinet) (resin/brine)
Brine Tank Size	18" dia. x 33" high	18" dia. x 33" high	18" dia. x 40" high	
Type Control Valve	Fleck 5600M	Fleck 5600M	Fleck 7000SE	Fleck 5600SE
Power Supply	110VAC 6ft. cord	24VAC inc. trsf.	24VAC inc. trsf.	24VAC inc. trsf.
Pipe Sizes	inlet, 3/4 or 1" drain, 1/2" brine, 3/8"	inlet 1" drain, 1/2" brine, 3/8"	inlet, 1.25 or 1.5" drain, 1/2" brine, 3/8"	inlet 3/4 or 1" drain, 1/2"
Fittings	Noryl Yoke	S.S. bypass Valve	Noryl bypass w. 1" sweat	Noryl Yoke
Weight, Pounds	95	125	180	85
Overall Dimensions	H-48", W-44"	H-62", W-44"	H-62", W-44"	H-45", W-12"

* This model has a s.s. jacket

Calculating Capacity

The resin capacity is one of the first things to establish for softener size. An average family uses 100 gal./day of water per person. A household of four needs 400 gal/day of softened water. If the water has a hardness of 20 grains per gallon, 8000 grains have to be removed per day (400 gal. X 20 grains/gal.) With regeneration every 3-days, the minimum softener capacity should be 24,000 grains (8000 grains/day x 3 days). A 1.0 cu. Ft. softener model should be selected

Accessories

Brass Yoke, 3/4", 1"
Brass Bypass, 3/4", 1"
S.S. Jackets w/ plastic cap
24 VAC Transformer