

# EDSE Water Softeners

## Hardness Removal



- Do you see unsightly scale build-up on your sinks and bath tubs?
- Do you have to use a lot of soap for your laundry or to clean dishes or to wash your hair?
- Does your coffee maker/kettle have whitish deposits after use?
- Does your hot-water heater, humidifier or dishwasher have scale build-up?

If the answer to any one of the above is yes, you likely have hard water.

### Hard Water – What is it?

Simply put, water that contains high concentrations of calcium and magnesium compounds is called hard water. When hard water comes in contact with heat (as in hot water heater or a kettle), these compounds precipitate out of solution and form a thick scale. Further, hard water does not form lather easily and requires more detergent or soap than soft water.

### Why should hardness be removed?

#### Laundry

Clothes washed in hard water often look dingy and feel harsh and scratchy. Continuous laundering in hard water can damage fibers and shorten the life of clothes. As hard water does not form lather easily, more detergent is consumed.

#### Bathing

Bathing with soap in hard water leaves a film of sticky soap curd on the skin. This may make hair dull, lifeless and difficult to manage.

#### Hot Water Heater & Piping

Hard water also contributes to inefficient and costly operation of water-using appliances. Heated hard water forms a scale of calcium and magnesium minerals (lime scale deposits) that can contribute to the inefficient operation or failure of water-using appliances. Pipes can become clogged with scale that reduces water flow and ultimately requires pipe replacement. Lime scale has been known to increase energy bills substantially.



### Rainfresh water softeners

Rainfresh water softeners remove hardness by ion exchange process, wherein hardness-causing calcium and magnesium ions are replaced by an equivalent number of sodium ions. Sodium ions do not form scale, thus making the water soft, while maintaining its chemical balance.

Rainfresh softeners feature a high-quality cationic resin that provides efficient hardness removal under varying water conditions and sources. They also feature a fully metered electronic control valve that sets off an automatic backwash and regeneration cycle (default set for 2AM) once the resin exchange capacity has been exhausted. During the backwash/regeneration cycle, the resin bed is cleaned up of dirt and recharged with a salt solution. Salt is stored in a separate container included with the system.

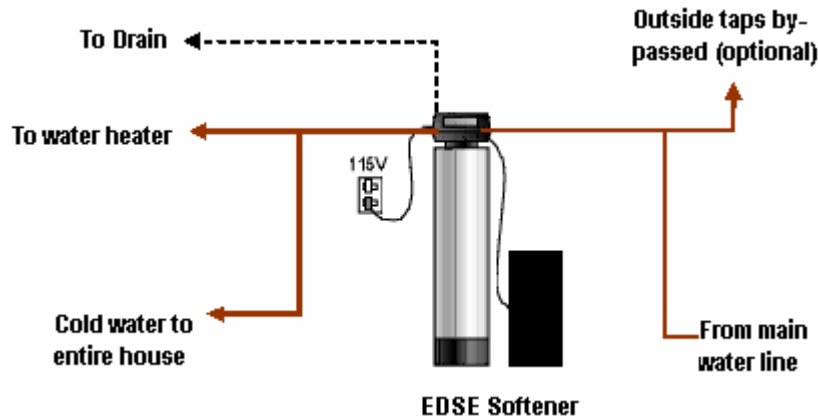
### ADVANTAGES

- Prevents scale build-up on sinks and bath-tubs
- Reduces soap and detergent consumption significantly
- Prevents deposits on teak kettles and coffee makers.
- Prevents Stains
- Treats water for whole house
- Does not require salt or chemicals to regenerate

**Soft water for the entire home !**

## Where to install Rainfresh EDSE Softener

The ideal location for installation on municipally treated water is just after the water meter, before the plumbing line divides into hot and cold. You may choose to by-pass outside taps if you want to.



For well/lake water, the ideal location is after the pressure tank before line divides into hot and cold. If turbidity, iron or manganese filters are installed, the EDSE softener should be installed after them, but before a UV system.

## Will I drink all the salt that I put in the salt tank?

It is a common misconception that the salt goes into the water. Salt is only used to recharge the softener resin with sodium after the resin capacity has been exhausted. Following this salt-recharge, the softener undergoes a rinse cycle during which any left-

over salt is discharged to drain.

## MODEL Specifications

Rainfresh Model	Capacity Grains	Max Flow Rate US GPM (LPM)	Max Flow to drain US GPM (LPM)	Media Tank size Dia x H (Inch)	Salt tank size Dia x H (Inch)	Inlet/Outlet connections	Shipping Weight lbs (Kg)
EDSE30	30,000	8 (30)	1.5 (5.5)	8" x 47"	21"x36"	3/4" MPT	105 (48)
EDSE45	45,000	12 (45)	2.0 (7.5)	10" x 54"	21"x36"	3/4" MPT	140 (64)
EDSE60	60,000	15 (56)	3.0 (11.3)	12" x 52"	21"x36"	1" MPT	185 (84)

\* - 1 US Gallon = 0.8327 Imperial gallon. Call Rainfresh for custom sizes. All models are equipped with by-pass valve, drain line connections and automatic electronic metered control valve.

## Conditions for operation

- Iron < 0.5 ppm
- Manganese < 0.05 ppm
- Turbidity < 1 NTU
- Free Chlorine < 0.2 ppm
- Hydrogen Sulfide – Nil
- Organics - Nil

EDSE softeners do not disinfect the water. They should not be installed on water that is microbiologically unsafe without adequate disinfection before or after the system. For details on available disinfection systems, call Rainfresh.

## ABOUT RAINFRESH/ENVIROGARD

For over 40 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.

Available at:

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