

Water softening

Protecting home, budget, environment

Rain falling from the sky is “soft” and free of impurities. But as it trickles through the earth, water picks up calcium and magnesium and can become “hard”.

Hard water causes problems in a home. It fades the colors of clothing, leaves a film on dishes and puts scaling on pipes, hot water heaters, faucets and showerheads.



Fortunately, a salt-generated water softener fixes the problem and saves money. It is the **only** product that can remove the calcium and magnesium, which is required for water softening. The benefits are immediate, including:

- More suds for better bathing, washing and dishwashing.
- Cleaner clothes that last longer.
- Less energy needed for hot water, cutting gas and electric bills.

Recent studies on detergents quantify the difference water softening makes.

- Washing machines can reduce detergent use by half, using 60-degree cold water instead of 100-degree hot water – and get the same or better stain removal.
- Dishwashers can run with up to 50 percent less detergent – with better results.

Appliances run better, longer and cheaper on softened water. That means fewer water heaters in landfills, and more money in wallets. According to a study on energy savings:

- Gas water heaters maintained factory efficiency rating over a full 15 years of use with softened water but lost up to 48 percent over 15 years with hard water.
- Shower heads using softened water maintained a full flow while three-fourths of those using hard water clogged with ugly scale restricting flow (see below).



Figure 5-27. Drum of the laundry washer using unsoftened water had significant water scale buildup on all of the interior surfaces.

Sources: The Detergent Savings Study was conducted in 2010 in conjunction with Scientific Services S/D, Inc. and funded by the Water Quality Research Foundation. The Energy Savings Study was conducted in 2009 in conjunction with the Battelle Memorial Institute and funded by the Water Quality Research Foundation. *Last update: 9/1/11*