



UNDERSTANDING THE DIFFERENCE BETWEEN SOFT WATER & ELECTRICAL SCALE REDUCTION

**WHAT'S THAT OLD SAYING?
IF IT SOUNDS TOO GOOD TO BE TRUE;
IT PROBABLY IS**

Some manufacturers of electrical devices that attach to your pipes make the claim that this process produces soft water. These devices can have the ability under certain circumstances to help reduce the amount of scaling inside your pipes and fixtures...but these devices do not remove calcium so they DO NOT produce soft water.

To get soft water, you need to remove the calcium. Presently, there is only ONE practical way for homeowners to soften their water and that is through an ion exchange water softener.

This brochure provides you, the consumer, the facts you need to analyze the many product claims in the marketplace and have a better understanding about what you are buying.

Knowing the basics about the science of soft water can help you know what questions to ask when trying to determine what's best for your home.

WATER QUALITY ASSOCIATION
www.wqa.org

The Water Quality Association is a nationally renowned resource for information on all types of water quality issues. They have extensive independent research that they make available to the public to educate consumers on the appropriate process for water treatment based on the particular issues of concern with your water.

Once you've done the research, it is always best to let a Water Quality Professional evaluate your specific needs. These certified specialists are required to take continuous education and pass rigorous testing in order to be CWS certified. These are certifications you can ask your local dealers to show so that you have the confidence in knowing you are working with a true professional.

To make sure you are getting the right products, look for these seals:



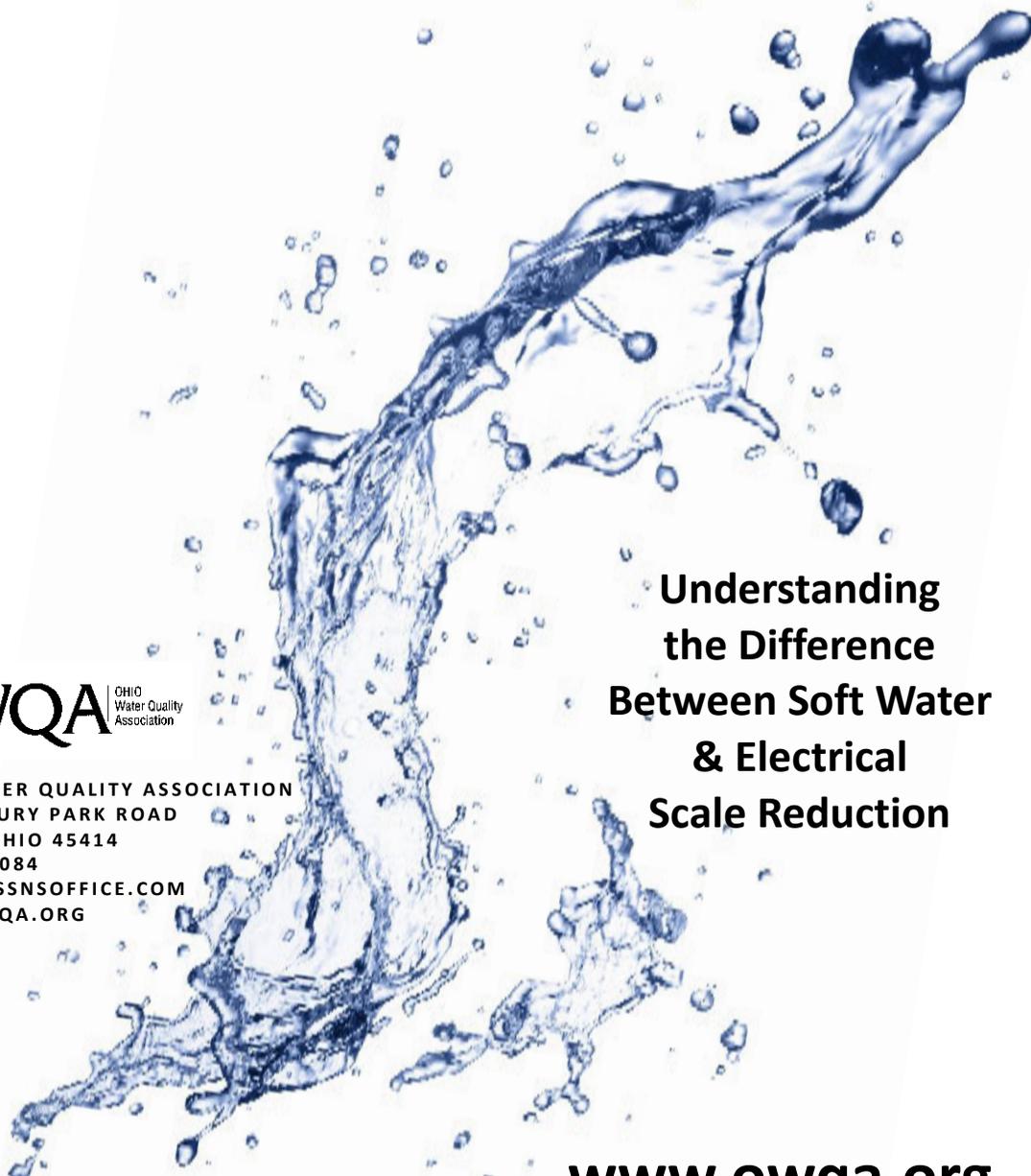
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Understanding the Difference Between Soft Water & Electrical Scale Reduction

www.owqa.org



What is water softening?

A Consumer Alert from Water Quality Association, Lisle, IL

Water softening is the removal of calcium and a few other minerals that can cause our working water to damage household property. When it deposits as scale, calcium carbonate (limestone) is an abrasive rock-like mineral.

Why soften your water?

Calcium that is dissolved in water forms deposits that:

- Abrade and fray the threads in clothing
- Stick to clothing and other household products and appliances (You can feel the difference between towels that are new and those that have been repeatedly laundered in hard water. Those laundered in hard water are rough, the result of rock encrustations embedded in the fibers.)
- Spot dishes, faucets, sinks, toilets, cars, in fact all surfaces, with a microscopic film of limestone.
- Deposits buildup inside water pipes, heaters, and bathroom and kitchen fixtures.
- Gas water heaters used 29% less energy to heat water and electric water heaters used 21% less energy when operated on softened water according to a study done by New Mexico State University.

How can water be softened?

Presently there is only one practical way for homeowners to soften their water and that is through an ion exchange water softener.

Briefly, here is how it works:

Ion exchange water softeners are filled with millions of tiny resin beads that attract and hold on to calcium. As the water passes through this resin "bed" the calcium is removed so it cannot harm your household goods.

What happens when the resin beads are full of calcium?

The resin bed is rinsed with dissolved salt, usually table salt. The dissolved salt scours the calcium from the beads which prepares them to remove more calcium. This rinsing process takes place every few days, usually at night.

Are there other alternatives that remove calcium from the water?

Not that we are aware of at this time. Some other technologies can remove calcium but at a very high cost in energy or wasted water. Ion exchange water softening is the most cost efficient method to remove calcium.

I've heard of other "salt free" devices that are offered as alternatives. What are they and what do they do?

First of all, you need to talk to the manufacturer of these devices to get the facts. Consumer protection laws are clear across the land. Manufacturers must have scientific test data to back up their claims for their particular product.

Since no testing standard exists in the US for these devices, we have not tested nor certified these products so we can only pass on what we have heard.

- We understand that there are products that are marketed as scale control devices.
- Scale is the rock-like mineral deposit (limestone) made up of calcium carbonate that forms inside water heaters, pipes, and fixtures over a period of time.
- Scale control devices can have the ability under certain circumstances to help reduce the amount of scaling inside these pipes and fixtures.
- **To our knowledge these scale control devices do not claim to remove calcium and so they do not produce soft water.**
- Controlling scale inside pipes, water heaters, and fixtures is an important benefit but it is only a partial benefit.

What is the Water Quality Association's Gold Seal and what does it mean to consumers?

The WQA Gold Seal is awarded only to products that have passed laboratory tests, literature review, materials assessment, and have been submitted to periodic audits according to ANSI NSF Standards. (NSF stands for the National Sanitation Foundation, a standards writing body that conforms with ANSI standards) Each technology is tested according to a different standard.

To avoid confusion, here are the basic standards:

- **Standard 42 - Drinking Water Aesthetic Effects.** These products are certified only for taste or odor or staining. No health claims have been certified on these products
- **Standard 44 - Cation Exchange Water Softeners.** These products are certified for the removal of hardness (calcium). Some manufacturers are also certified for the removal of barium & radium.
- **Standard 53 - Drinking Water Health Effects.** These products are certified for the removal of specific health contaminants. Look for the manufacturer's listing of the contaminants that were tested.
- **Standard 55 - Ultraviolet Microbiological Treatment Systems**
- **Standard 58 - Reverse Osmosis Treatment Systems**
- **Standard 61 - Drinking Water Treatment Components Health Effects.** This standard ensures that the product itself does not impart health contaminants to the drinking water that comes in contact with it. The other standards all require this kind of testing as part of their certification.
- **Standard 62 - Drinking Water Distillation Systems**
- **Standard 171 - Shower Filtration Systems Aesthetic Effects**

A full listing of all products that have been certified by WQA can be found on the WOA web site www.WQA.org.

BBB Letter to Consumers:

Better Business Bureau of Northwestern OH & Southeastern MI – April 2012

SCALERID NOT PROVEN TO SOFTEN WATER

A recent full page newspaper advertisement claimed, *“Now you can get rid of hard water problems without expensive water softeners.” Also, notice how you can save on the expense of salt by installing a magnetic coil around a water pipe which somehow rearranges water chemistry with “complex signal fields.” Do you want to cure problems such as poor lather from detergents and shampoos, sticky hair, itchy dry skin and a hot water heater that heats up more slowly due to scale buildup? ScaleRID to the rescue! Use of this “Green Alternative” environmentally friendly device, you can eliminate the discharge of harmful, toxic chlorides, use electricity equivalent to that of a nightlight and be free of scale buildup in 4-5 weeks.*

Not only is the BBB aware of these scientifically unproven claims, but so is the **Water Quality Association**, an organization that is certified by the **American National Standards Institute** for conformity assessment. **Ohio WQA Executive Director, Bob Pope**, has issued a written report to manufacturers of **ScaleRID** not to advertise information that is misleading to the public about water softening, and about the negatives of soft water systems causing health problems.

The report quotes, **“To our knowledge these scale control devices can have the ability under certain circumstances to help reduce the amount of scaling inside pipes and fixtures. To our knowledge these scale control devices do not claim to remove calcium and so they do not produce soft water.”** Furthermore, “We have also been informed that when individuals contact the telephone number provided in the advertisement that the representative makes the flat statement that this product provides

soft water and does not clarify that the product basically deals with just scale buildup in the plumbing system.”

Research suggests that scientists remain skeptical about the effectiveness of using magnetic coil devices to dissolve chemical buildups in water systems. What seems apparent though is that water can be softened only by the removal of calcium using an ion exchange salt based system.

Jeff Knedler, president of Hempy Water of Tiffin, wonders who wouldn't be drawn to an advertisement which offers a ScaleRID device for \$179 when a proven reliable system costs much more. One customer tried using a **ScaleRid** like device without any useful benefits. Knedler noted that **reputable water treatment businesses don't sell products based on pipe coil technology** which, he said, is available only through call centers.

Rob Breitner, owner of Culligan Water Conditioning, Ida, MI, reported a similar customer reaction to the device. **Not only did it not soften water, but there was no improvement to water pipe buildup.** And that was after 120 days of use, not 4-5 weeks as the **ScaelRID** ad states.

It is interesting to note that **ScaleRID** is owned by **Arthur Middleton Capital Holdings** of Canton, Ohio, advertisers of **BBB F-rated Heat Surge (Amish Mantle Heaters), World Reserve Monetary Exchange** (collectible presidential coins, sheets of \$2 bills and armored safes), **Clear Cast Digital** HDTV antennas and others .

The **Canton BBB** has challenged International Home Shopping, marketers of **ScaleRID**, and continue to await substantiation of advertised claims. Advertisements for Middleton companies are instantly recognizable by their “advertorial” news release format which cover full newspaper pages and appear in Parade magazine.

Be watching.