Waconia Hot Topics

What exactly does it mean to have hard water?

Water described as "hard" is high in dissolved minerals, specifically calcium and magnesium. Water hardness varies throughout the United States, but in Minnesota it is 3-5 times worse than the national average! Hard water is not a health risk, but a nuisance because it can cause mineral build up on household fixtures and causes soaps and detergents to be less effective. Water is a great solvent, so if minerals are present in the soil around water supply wells, water delivered to homes could be hard water.

How does hard water impact us?

- Causes laundered clothes to look dingy or feel stiff & scratchy.
- Dishes and glasses may be spotted when dry.
- Showers, tubs, sinks & faucets can be covered in a film.
- Hair washed in hard water may feel sticky & look dull.
- Soaps & detergents become less effective, therefore more product is needed to do the job.
- Eventually water flow may be reduced by deposits in the pipes. Hard water also contributes to inefficiency in water -using appliances.

Measurement of water hardness

Water hardness is measured by grains per gallon (gpg).

1 Grain = 17.1 parts per million (ppm)

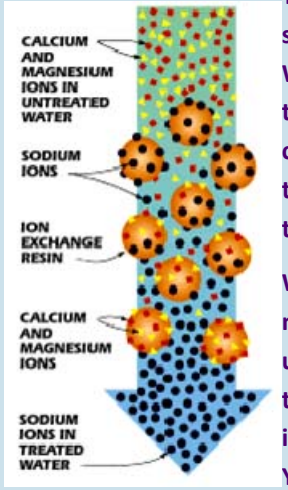
According to the Water Quality Association…

Soft: 0-3.5 grains per gallon (gpg),
Moderate: 3.5-7.0 gpg,
Hard: 7.0-10.5 gpg, and
Very hard: over 10.5 gpg

City of Waconia's water hardness level is:

26-27 gpg of hardness

All about hard water



The solution to hard water is removing the calcium & magnesium. The most common treatment is using a water softener. Water softeners use an ion exchange process. Resin beads in the softener attract and hold the calcium & magnesium particles. Then the salt brine solution flushes over the resin beads to flush & discharge the calcium & magnesium particles off of the resin beads.

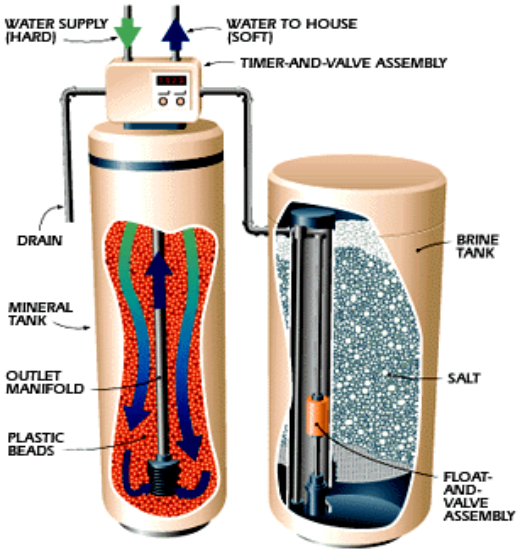
While hard water poses no health hazard, sodium that remains in softened water may be a problem for those on sodium-restricted diets. Other people simply may wish to avoid the slightly salty taste of treated water. In either case you can install a separate water dispenser that bypasses the softener. You also can use potassium chloride instead of salt, although this costs much more.

Avoid Salt Bridges

A salt bridge is when the softener salt forms a hard crust and creates an empty space between the water and salt which prevents the salt from dissolving into the water and creating a brine. Without the brine, the resin beads that soften the water can't do their job.

Avoid Unnecessary Regeneration

The regeneration process can use up to 60 gallons of water each time, so if it is regenerating more frequently than needed, it can waste a lot of water and make an impact on your water bill! Check the settings and make sure the control valve is functioning properly.



Sources:
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