

Effective Elimination of Hard Water Mineral Deposits left after Evaporation

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By Lindy Ausburne

For over 30 years Lindy has built a solid reputation in the world of concrete by combining industry knowledge with hands-on field experience. In

her opinion, these are the key components in assuring those who have a vested interest receive true and lasting value in regards to classic beauty, attention to detail, and premium performance.

It is her personal belief that an honest and reliable reputation is the recipe for success, and throughout her career she has worked hard at increasing the demand and overall image of the hardscapes industry.

Lindy now runs High Definition Concrete consulting and is actively involved in a number of forums aimed at the improvement of the decorative concrete industry.

Over 85% of the country has hard water; especially rural areas that are supplied with water from aquifers or wells due to the naturally occurring minerals. The primary minerals contained in hard water are calcium, magnesium, and in some cases iron.

Calcium containing minerals are calcite and gypsum; with magnesium ones being dolomite. The presence of these can take a heavy cosmetic toll on beauty associated with decorative concrete surfaces. As the water evaporates these minerals remain in the form of whitish deposits ... limescale build up from the calcium have the potential to etching/eat into sealers. Effective cleaning/maintenance necessary to removal hard water mineral deposits is labor intense, time consuming, and can be difficult (*the harder the water, the worse the condition will be*). Iron in the water is another troubling issue, in that it can leave orange like stains that are extremely harder to remove.

Hard water contributes to soap scum build up on surfaces. Soap scum contains calcium stearate, brought about by sodium stearate (*main component in soap*). I'm sure that everyone has dealt with soap

scum, mineral deposits, and rust stains on glass shower doors, tubs and sinks, tile surfaces, etc ... decorative concrete surfaces are no different (*the harder the water the more dire the situation*).

What's the solution to your customer's surfaces remaining pristine if they have hard water? ... a **"in-line garden hose water softener filter"**! These work by replacing the calcium and magnesium ions with sodium ions, neutralizing and eliminating hard water; as well as raising the PH associated with low PH acidic water. The filter also removes rust, chlorine, chloramines, and other chemicals. Sodium ions are soft and don't produce scale, stain, or leave water spots. Garden hose in-line water softening filters are nominal in cost (*approximately \$45.00 for the canister the hose attaches; \$35.00 for the water softener cartridge; the cartridge is rechargeable with rejuvenating tablets*).

Exterior decorative concrete surfaces are frequently textured, stamped, scored/engraved, have decorative designs that create 3D tile/etc images, etc (ergo: water stands longer on them than typically more flat/level/smooth interior ones) ... the same is true of exposed aggregate concrete and epoxy stone surfaces. When these surfaces (*patios, driveways, sidewalks, pool decks, etc*) come in contact with water from sprinklers; or, routine cleaning; they become very susceptible to hard water mineral deposits that distract from their vibrancy of color, classic style, and take on a neglected appearance. By eliminating the hard water using an **"in-line hose water softener filter"** this problem is resolved, to the elation and satisfaction of your customers, since all water that accumulates on the surface will have the minerals and other

chemicals/contaminates removed (*note: rain water does not have a concentration of minerals associated with hard water since it has been cleaned by the process of nature itself.*

As an additional “plus factor” property owners will appreciate that they will not have mineral deposits or soap scum (calcium *stearate*) left on their vehicles after washing/rinsing; as well healthier potted plants, lawns, and other flowers/greenery since the filter also eliminates acidic low PH of the water flowing through it.

**** I wrote the above for "The Generator" (a quarterly newsletter that I write for McKinnon Materials www.mckinnonmaterials.com) ...since I believe this to be relevant as to cleaning and maintaining the beauty of a decorative concrete surface I am posting it in entirety here.*