

How Salt Damages Your Concrete and Why You Should Seal Concrete Yearly with High Quality Sealant

Salt is definitely the number one enemy of concrete. Salt damage to concrete is widespread and common. Yet every winter we spread ice melting salt compounds all over our streets, sidewalks, driveways, stairs and walkways as if concrete salt damage was of no concern at all. There is a choice to make between safety and appearance, and safety wins every time. Drivers and pedestrians need to be the priority. So, out comes the salt trucks, the trips to the hardware store for ice melting products and for three or four months every year we bombard our concrete with enemy number one: salt. And concrete salt damage is the inevitable result.

Even if you choose not to salt your own property, salt finds its way into your concrete driveways, concrete garage floors, and walkways. As the salt melts the ice and snow on the roads, the slush is transferred to the underside of a vehicle and onto its tires. When the vehicle pulls into your drive and parks in your garage, the slush drips off the vehicle, and soaks right into the concrete. Salt is then stepped on and carried by shoes and boots to all the nearby walkways. And now the problems begin.

Concrete is the oldest man-made building material on the planet. It is made from easily found natural materials and is considered to be hard and durable. But one look at a salt damaged concrete walkway can tell you that this notion of "hard as concrete" has some holes in it... literally.

The problem is actually in the chemistry. Without getting all scientific and technical, it can be explained this way: do you remember learning about pH in school? PH is the measurement of alkaline/acid. Concrete is naturally very alkaline, being made up of lime, sand, stone... and has a very specific optimum pH range to maintain its strength, hardness, and cohesion. When a highly acidic compound is introduced into the concrete, the pH level is thrown completely out of whack and the concrete begins to deteriorate.

This is what we see when salt is used to melt ice and snow on a concrete surface. The very act of melting the ice allows the resulting water to flow down into the concrete through tiny pores, and that water is carrying the salt down with it. Once inside, the salt permeates the slab and goes to work- ruining it. This process may take years to become visible, or it might show up early on in the 'life' of your concrete. But it begins with the very first application of salt products and concrete salt damage is sped up with every subsequent salting.

High Quality Sealant

No – I'm not talking about anything you typically buy at the big box stores. Low quality sealants break down in the sun's ultraviolet rays very quickly. They tend to break down and wash off during heavy rains, and they also wear off when cars drive over them. If you apply a cheap sealant in the summer, very little of it is left when winter (and the salt) rolls around.

Sage Homes, Inc. purchases high quality and wear resistive sealants from concrete supply stores. These products have been highly tested in our Minnesota environment and are even used by the Minnesota DOT for concrete sealing on roadways and bridge decks. Concrete is expensive. If you want to extend the life of your concrete, and get the most value from it, seal it yearly.

How Do We Seal Your Concrete

Applying concrete sealer is fast, easy, and will typically be dry in a day, letting you park on your driveway that night. Additional services to sealing your concrete are:

- Cleaning of oil spots to enhance the look of the driveway and allow the sealant to better adhere.
- Pressure washing the concrete to remove dirt and grime.
- Light stain and rust spot treatments to brighten the concrete.
- Do you have gouges, craters, rock pops, cracks in your concrete? We have products to spot repair these areas and extend the life of your concrete.
- Stain existing concrete in several choices of colors for a new look.

Concrete is beautiful and durable. It is also expensive. An ounce of prevention is worth a pound of cure.