VANDERVART
Concrete Products

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Proper Concrete Maintenance

Concrete should provide many years of service. However, concrete needs proper maintenance just like the other investments a homeowner makes. Proper concrete maintenance includes cleaning and sealing the concrete. Concrete that is properly cleaned and sealed will minimize problems that can occur due to winter weather conditions and chemicals. Concrete is not waterproof, but actually porous. The goal in sealing concrete is to fill the voids or pores in the concrete with a high quality sealer to prevent continuous water saturation and/or chemical attack.

The winter season is usually the toughest on concrete pavements, driveways, garage floors and walkways. Repeated freeze/thaw cycles can saturate the concrete, and then cause stress to the concrete surface with expansion and contraction of the freezing water and moisture. Even if a homeowner does not directly apply snow and ice melt chemicals to their concrete surfaces, some chemicals will probably end up on the concrete. During the winter season, road salts and de-icing chemicals are applied to roadways and parking lots. Driving an automobile on the public roads will undoubtably pick up some of these chemicals and then track them back to your driveway and garage.

Sealing concrete will protect it from de-icing chemicals, anti-ice chemicals, fertilizer chemicals, oils and liquids that can stain. In Wisconsin, the best time to clean and seal concrete is during the fall season, because temperatures are favorable and the humidity is usually low. Ideal temperatures rage from 60 – 75 degrees Fahrenheit with humidity and dew point below 55%.

How do I properly clean and seal concrete? This document is applicable to natural gray color concrete in Wisconsin. Cleaning and sealing decorative concrete is done a bit differently, with alternate products.

1. Clean the concrete with a pressure washer to remove any stains, mold and dirt. Regular dish soap can be used safely, but often it is not needed. If there are rust stains or other stains that do not come off with the pressure washer and dish soap, see VanDerVart Concrete Products for concrete cleaners that are safe for concrete. Never use acids to clean concrete. Watch the weather forecast to plan for several consecutive dry days.
2. After the concrete is cleaned, protect it from auto and foot traffic with caution tape or barricades.
3. After cleaning, let the concrete air dry for at least two consecutive days. The temperature, wind and humidity levels all contribute to the time it takes for the concrete to dry. If water or moisture is in the saw cuts or control joints, a leaf blower can be used to blow out the water and aid in the drying process. Check the control joints for moisture with a piece of paper – insert the paper into the joints and then view the paper for water. If the paper, and therefore the joints are wet, the concrete is not ready to be sealed. It is very important that the concrete be dry. If the pores in the concrete are filled with water, the sealer cannot fill those pores in the concrete.
4. Apply a high quality concrete sealer. The sealer must be compatible with any cure and seal product previously applied to the concrete. Typically, a solvent base siloxane sealer is used. Siloxane sealer may be applied with a brush, roller or sprayer. A hand sprayer works best for this product application. Siloxane sealer is easy to apply and will not alter the color of the concrete. It will have a strong odor until it dries, but the odor will dissipate quickly. Siloxane is available from VanDerVart Concrete Products.

It is also recommended to fill all of the saw cuts or control joints with a concrete caulk. Open joints or gaps in the concrete will allow water and chemicals to enter the concrete and saturate the concrete. We recommend filling the joints prior to sealing the concrete. Allow several days for the caulk to cure and dry. Be sure to use a high quality, exterior grade, flexible, silane sealant.

Proper cleaning and sealing of your concrete should add years of service life. The service life will depend on the traffic flow, the surface texture of the concrete and the quality of the sealer. A typical residential concrete driveway should be cleaned and sealed every ten years. Most homeowners can clean and seal their concrete; however, we can recommend contractors that preform this work.