Cure the concrete. Properly cured concrete preserves the mix water, which prolongs and maximize the hydration process of the concrete. Properly hydrated concrete increases strength, abrasion and freeze/thaw resistance. It also decreases permeability which extends the service life of the concrete.

The surface, which is exposed to environmental conditions, is typically the first portion of the concrete to dry out. Begin curing concrete immediately after the final finish. Concrete should be cured for a minimum of 3 to 7 days depending on the mix design used and/or ambient conditions. When temperatures are below 50° F, it may require extended cure time. For cold weather placements, cold weather concrete practices should be followed to protect the concrete from freezing.

Refer to Cemstone’s concrete curing and sealing guidelines found at cemstone.com in Cemstone’s Flatwork Concrete Guidelines for different curing and sealing methods as well as cold weather precautions. Contact Cemstone Contractor Supply at 651-905-1500 for product recommendations.

Seal the concrete. Properly sealing helps maintain the concrete durability and appearance. After the concrete has had enough time to air-dry, the concrete should sealed (refer to the sealer manufacturer’s recommendation for application timing). Sealing compounds are applied to the surface of hardened concrete to reduce penetration of liquids and/or gases such as water, deicing chemicals, and carbon dioxide that cause freeze/thaw damage, corrosion of reinforcing steel and acid attack.

Sealers are generally classified as either penetrating or membrane forming. Penetrating sealers, such as siloxanes and silanes are preferred. They penetrate and chemically bond to the concrete which prevents moisture from entering the concrete. Acrylic membrane sealers cover the concrete surface with a water resistant barrier.

Eventually, sealers will degrade from the environmental effects and with wear & tear which will no longer function as intended. Concrete should be resealed on a regular basis in accordance with the manufacturer’s instructions or as service wear requires.

Protecting your investment. The best maintenance is the preventive kind. Preventive maintenance involves cleaning the concrete down with water or cleaning with a broom. Any broom works well for the outdoor areas and makes quick work of sweeping away errant leaves, dirt left by shoes, and the dust and dirt kicked up by wind or rain.

• Avoid using harsh acids for cleaning concrete. Use products designed for safe use on concrete.
• Make sure your concrete is sealed PRIOR to the first winter.
• Promptly removing snow and ice accumulation from your concrete will keep it dry which will minimize the amount of freeze/thaw cycles it undergoes.

• Avoid using de-icing chemicals on your concrete during the first winter. Instead, use Cherry Stone Traction Grit or sand for traction.
• Avoid fertilizer from getting on the concrete. Promptly sweep off any fertilizer that is inadvertently cast on the concrete when lawn spreading. Fertilizers contain substances which chemically attack concrete.
• Always check the labels on deicers. Never use products which contain ammonium or magnesium. These products are often packaged and sold as deicers, but they rapidly deteriorate concrete.

Preventative Maintenance. Reapply per your sealer manufacturer’s recommendations. When water no longer beads on the surface of the concrete, it is time to reseal.