

# www.StoneRidgeLandscapingInc.com

# **Paver Patio Care**

When correctly installed and maintained, all Stone Ridge Landscaping Inc. products will provide a durable and pleasing surface for years to come. However, like many other construction projects, periodic maintenance will preserve the serviceability, beauty and integrity of the installation.

The joints between paving stones are undoubtedly the most vulnerable areas of any paving stone installation. Depending on the climate and amount of use, even the most expertly installed patio may require attention to the joints at some time in its life.

When using a power wash tool or garden hose to clean the paved area, the water should be directed at the surface at an angle not greater than 30 degrees and across the diagonal (i.e. not parallel to the joints as the water can be harsh and break up the jointing material).

Any cleaning product used must be thoroughly rinsed from the surface and channeled to suitable drainage points. Once the area has been cleaned, it should be inspected to ensure the integrity of the sand joint and any eroded joints should be re-sanded as necessary

# Cleaning

A regular cleaning routine using a stable broom and a good detergent, followed by the application of a weed preventative will help maintain the beauty and keep the splendor of any paver installation. We recommend that you follow our recommendations outlined below.

Cleaning is also an essential step in preparation for sealing concrete pavers. Prior to cleaning, the area should be inspected for any cracked or broken units. These should be replaced. Adjacent tree branches, shrubs and vegetation should be pulled back or covered to protect from overspray of cleaning solutions. Protective clothing and goggles should be worn when working with acid-based solutions.

Consider where the cleaning fluids will drain. They should drain across the pavement and not onto the grass or vegetation. Do not let silt or cleaners stand in low spots as this may strain the pavers. Be sure to rinse these areas thoroughly.

Automatic sprinkler systems should be turned off during cleaning and sealing operations.

When using all cleaning solutions, and especially those containing acids, a small, inconspicuous area should be cleaned to test for surface and color reaction. Acid cleaners will dissolve a thin layer of cement on the surface of the pavers, so the color of the pavement may change slightly. Always follow label directions for use application, precaution and first aid. ALWAYS REFER TO

MSDS. Contact 574.534.9800 or visit www.StoneRidgeLandscapingInc.com, if you require a copy and cannot locate on through the product manufacturer.

An efficient method of overall cleaning is high-pressure spray. Some systems mix water and a cleaner together in the spray. Care should be taken to not blow or wash the sand from the joints. Sand will remain in the joints if a wide spray nozzle is used and the angle of the spray is kept from directly penetrating the joints.

As with a cleaning job, a small area should be tried first to test the result of the spray. Never spray so close to the stone that you damage the appearance of the surface.

#### **Grease and oil stains**

Oil will penetrate readily into a paved area, but will not stain if any spillage is removed promptly with an absorbent material (e.g. paper towels or cloth). The spillage should be soaked up, not rubbed, as this will spread it over a large area, driving the stain deeper into the concrete.

Oil & Dirt Remover- Is the most effective product available for removing oil spots from paving stones and concrete. Oil & Dirt Remover dissolves, dislodges and encapsulates oil to ensure thorough cleaning, without leaving any oily film after rinsing. Always follow label directions for use, application, precaution and first aid.

#### **Efflorescence on concrete**

Efflorescence is a naturally occurring calcium salt that sometimes appears on the surface of concrete-based building materials and clay products. As the cement and water chemically react together, calcium hydroxide is produced. As the concrete dries, the calcium hydroxide reacts with the carbon dioxide in the atmosphere to produce calcium carbonate, which manifest as a white solid. Repeated exposure to wetting and drying accelerates the "wicking" of the calcium to the surface.

The occurrence of efflorescence in the pores of the concrete can lead to the appearance of white patches on the surface or an overall lightening of the product, which is often mistaken for the product fading. Although the appearance of efflorescence can be worrying, the effects of efflorescence are purely aesthetic and do not alter the strength or durability of the concrete pavers. This normally goes away naturally after a season of rainfall. It is possible to accelerate its removal by washing with Efflorescence Remover.

Efflorescence Remover- Is specially formulated to dissolve efflorescence and remove groundin dirt on paving stones and concrete, without discoloring or damaging surfaces. It cleans evenly, and enables the sealant to better penetrate the pavers. Always follow label directions for use, application, precaution and first aid.

#### **Rust stains**

Rust stains arise from water running over oxidizing (rusting) metal objects and then staining the surface.

**Rust Remover**- Cleans rust from paving stones and concrete, without discoloring the surface. Short-term stains caused by metal objects sitting on the surface can be easily removed with this cleaner. Rust stains caused by metal scrapings from equipment such as snow removers may by difficult to remove. It is recommended that Efflorescence Remover be used after cleaning rust stains, so that all areas will have a more uniform appearance from cleaning. Always follow label directions for use, application, precaution and first aid.

### Paint, Tar, & Rubber Stains

Paint, Tar & Rubber Remover- Will dissolve paint, tar and even chewing gum from pavers, concrete and masonry. Often used to clean high traffic areas where vehicles turning sharply may cause unsightly tire marks. This cleaner works best when allowed to soak into the stain for 5 to 10 minutes prior to rinsing. Use the cleaner a second time if necessary. This product will dissolve sealer, making re-sealing necessary. Always follow label directions for use, application, precaution and first aid.

# Sealing

Sealants can inhibit staining and enhance the color of concrete pavers. They are useful around pools, BBQs, driveways, trash receptacles and other areas subject to stains, and where oil dripping may occur. Sealers are also used to stabilize joint sand.

# **Application of Sealants**

Often, concrete pavers must be subjected to repeated exposure of moisture and evaporation prior to cleaning and application of sealers.

Repeated cycles of moisture and evaporation will cause efflorescence near the surface to come to the surface of the pavers. All dirt, oil and efflorescence must be cleaned prior to sealing.

The cleaned surface must be completely dry prior to applying sealers. If the surface is not dry, or there is efflorescence under the pavers (i.e. in the sand, base or soil), sealed pavers will draw the efflorescence to the surface. The applied sealer can become cloudy and diminish the appearance of the pavers. Sealers can be applied with a foam hand roller if the area is small (under 400 sq. ft. or 37 sq. m).

For larger areas where a more efficient application is needed, a low-pressure sprayer is recommended. Follow the instructions for the best method and protective gear to be worn during the job. Block the area from traffic once the sealer is applied until the sealer is completely dry. Sealers may require re-application after a couple of years.

## **Protective Sealers: Water Base & Solvent Base**

#### **Water Base Protective Sealer**

A thermoplastic acrylic emulsion, whitish in color in liquid state, it becomes clear when dry. Since it contains very little solvent, it does not emit unpleasant odors, and is therefore ideal for interior applications. It gives a satin finish, which practically does not affect the original color of the concrete surface.

#### Solvent Base Protective Sealer

A transparent resin that is specially designed to protect concrete pavers, slabs and other concrete surfaces. It intensifies the color of the pavers or slabs and gives them a semi-gloss finish.

Both types of protective sealers penetrate the concrete deeply for maximum effectiveness and durability. Sealers facilitate maintenance by reducing oil and dirt penetration. Neither protective sealer will peel, discolor or make the pavement slippery. They resist the elements (freeze-thaw cycles, sun, snow, rain, etc.) as well as de-icing salts and products.

# Joint sand stabilizer and paver sealer

Joint Sand Stabilizer & Paver Sealer is dual-functioning. It is a clear microporous acrylic emulsion designed to protect the surface while bonding the joint sand in place. Its superior penetration and adhesion properties keep joint sand in place, preventing erosion, weed growth and insect infestation. It also reduces oil and dirt penetration, which makes cleaning easier. By stabilizing the joint sand, you also prevent sand from tracking into the house or pool. Once set, it remains flexible, allowing it to accept the movements of pavers and slabs in varying climatic conditions. This product will not peel or discolor. Its water-based formulation makes it is easy to apply and odor-free. This product contains very little solvent, making it an environmentally friendly product.

#### Polymeric sand

The infiltration of rainwater or other sources assists the sand to be washed out of the joints. It is important that these joints are topped up with jointing sand to prevent the loss of interlocking, allowing the pavers to move independently. To prevent this from occurring, it is strongly recommend that paving joints be filled with Polymeric Sand. Although regular jointing can be acceptable for most applications, it is critical to prevent the sand from being washed and blown out of the joints. Sloped areas or areas around swimming pools should have Polymeric Sand swept into the joints at the time of installation.

Polymeric Jointing Sand is a mix of graded sand and binder, especially formulated for the filling of narrow or wide joints between pavers. Unlike regular sand, this sand resists insect infestation, weed growth and erosion caused by rain, frost, wind, suction, etc. It is ideal for stabilizing horizontal or sloped installations, such as driveways, patios, pool decks, pedestrian ways, parking lots, roadways, airport traffic areas, etc. This product allows for some movement of the pavers without loss of the jointing sand. It is applied dry and hardens after moistening.

### **Chemicals & Acids**

When using chemicals for the cleaning of paving stones, the manufacturer's instructions should be carefully read and strictly adhered to. In general, the following precautions should be taken:

- When using chemicals, protective clothing such as gloves, goggles, boots and overalls should be worn.
- Proper ventilation is required to confined spaces when using chemicals.
- When using any chemicals, care must be taken not to damage, contaminate or stain any adjoining material.
- When diluting acids, ALWAYS add acid to water and not water to acid.
- Any clothing that is contaminated with chemicals should be disposed of safely.
- Care must be taken to protect personnel operating in the area of the cleaning from an injury or hazard created by the cleaning.
- Care must be taken in the disposal of any runoff material.
- Empty containers must be disposed of at your local household hazardous waste return facility.