HANOVER® ARCHITECTURAL PRODUCTS

MAINTENANCE GUIDELINES FOR CONCRETE PRODUCTS
Hanover® Prest® Pavers, Prest® Bricks and Masonry units are fabricated to meet and/or exceed the industries highest standards. When Hanover® products are installed properly, they require very little maintenance and provide an attractive and durable surface for many years.

Under normal use, pavers will be exposed to dirt, stains and wear that is common to all types of pavement surfaces. This guide will assist you in maintaining your pavers’ original appearance and will prolong the life of the installation. This is only a guide. If you have a condition that is not mentioned in the following instructions, please contact a Hanover® Sales Representatives for more information.

GENERAL CLEANING OF PAVERS

This type of cleaning is typically preformed weekly or monthly to remove general dirt and debris from the paver surface.

1. Use a standard garden hose and a stiff bristle brush (nylon is preferred) to hose down and scrub the pavers. This method will allow you to free and loosen any general dirt from the surface and rinse away.

2. For areas where you have ground in dirt, follow the instructions in Step 1. In addition, use a mild detergent to help release some of these dirt particles. The areas that typically get excessive dirt build up are those of heavy foot traffic.

Please Note: When hosing down the paved area, be sure not to concentrate spray directly into the joints. This will wash out the joint sand, which is necessary to maintain an interlocking or tight installation.

EFFLORESCENCE

What is Efflorescence? It is a whitish powder-like deposit which sometimes appears on concrete or clay products. The deposit is the residue of a soluble salt carried to the face of the product by moisture and left on the surface as a dry powder following evaporation of the moisture. The phenomenon was reported on as early as the 1870’s. Efflorescence of itself in no way affects structural integrity.

Where do the salts come from? The salts are found in either the native soil, the gravel base or in the sand, stone or cement used to manufacture the paving stones.

How does it happen? These salts dissolve in either the ground water, rain water or water added to mix the concrete. The salt moves upward with the moisture to the drying surface by capillary action. In the basement walls, this capillary action has been measured to be as much as 600 mm. Because the sun evaporates the moisture at the surface, this capillary wicking action continues to draw moisture from below. The efflorescence continues until either the salt or moisture supply has been exhausted.

LAMININ® works to substantially reduce efflorescence. Hanover® Pavers manufactured with LAMININ® have an extremely low water absorption rate which substantially reduces the effects of efflorescence. Developed by Hanover® Architectural Products, LAMININ® will protect against acid rain and ultraviolet light to keep Hanover® Pavers looking vibrant and new for years to come. Contact Hanover® for information about LAMININ®.

How is it removed? Efflorescence will wash and wear off in the course of time. The recommended procedure is to allow this natural process to take place.

However, if you would like to speed up the process, it can be removed by washing the pavers in a mild cleaning solution. (Cleaning solutions can be purchased from your Hanover® distributor - be sure to follow manufacturer’s instructions since the cleaners can be harmful). A small unobtrusive area should be treated first to ensure results are acceptable since the cleaning solution may expose aggregate on the paver’s surface leading to a lessening of the color mass.

No responsibility can be accepted by the paving stone manufacturers for efflorescence since any normal concrete contains calcium hydroxide which is inevitable when cement and/or lime and water are mixed together. Calcium hydroxide combines with carbon dioxide in the air to form calcium carbonate which then appears as a whitish deposit, or efflorescence.
## COMMON STAINS & TREATMENTS

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<thead>
<tr>
<th>STAINS</th>
<th>TREATMENT</th>
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<tr>
<td>1. Oil and grease</td>
<td>Soak up excess oil with rags. Then cover with an oil absorbent material, like kitty litter. Leave on stain for 24-48 hours, and then sweep dry. Another option would be to apply a 100% pure citrus degreaser, directly to stain, and then blot up with a rag and hose area down.</td>
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<td>2. Chewing Gum</td>
<td>Apply small amount of dry ice and then scrape off with a putty knife or apply 100% pure citrus degreaser, apply directly to gum marks and scrape off.</td>
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<td>3. Paint</td>
<td>Use rags to remove excess paint by blotting, do not wipe, it will spread the paint around. If the paint is a latex, water based, soak with hot water and scrub by using detergent with a stiff bristled brush. Rinse periodically, repeat as necessary. Oil, paint and sealer remover is a specialized cleaner that can be applied after oil-based paint has dried. Follow manufactures instructions.</td>
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<td>4. Leaf and Wood Rot</td>
<td>Apply household bleach and scrub with a stiff bristled brush.</td>
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<td>5. Mortar</td>
<td>Try to remove immediately with a garden hose. If that is not possible, let it harden and remove with a scraper or putty knife.</td>
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<td>6. Tobacco</td>
<td>Apply household bleach and scrub with a stiff bristled brush.</td>
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<tr>
<td>7. Rust Stains</td>
<td>Directly apply Rust Stain remover to the effected spots to lift these types of stains. Contact Hanover® for specific material.</td>
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<td>8. Grease drippings from food, ketchup, mustard</td>
<td>Apply general concrete paver cleaner to these types of stains. Follow the manufacturer’s instructions on side of container.</td>
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<td>9. Clay Soils</td>
<td>Scrape off the dry built-up material with putty knife, scrub and rinse off with hot water. A detergent may be necessary to release the stain.</td>
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<tr>
<td>10. Tar</td>
<td>Apply 100% pure citrus degreaser. Apply directly to stain, blot up with a rag and then hose area down.</td>
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<tr>
<td>11. Tree Sap</td>
<td>Apply 100% pure citrus degreaser. Apply directly to stain, blot up with a rag and then hose area down.</td>
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<tr>
<td>12. Concrete dust from cutting</td>
<td>Rinse immediately with water and/or use a cleaner designed for cleaning concrete pavers.</td>
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Please Note: If the stains are severe and cannot be removed, pavers can be replaced with new materials. Unlike other paving materials, concrete pavers will not have the extreme unsightly patch marks.

### SNOW REMOVAL

Snow can be removed from both on-grade applications as well as plaza deck installations. We suggest the use of shovels or walk behind snow blowers. Be sure to use rubber or nylon tip equipment, this will help prevent scratches and/or scars in the pavers. If you use a snow blower, do not use chains on the tires as they could cause damage to the face of the pavers.

When Hanover® Prest® Bricks are used in vehicular applications, use standard plowing procedures. The plow should have a standard rubber tip to reduce the scaring of the pavers. The use of chains on the tires is discouraged.

De-icing materials are detrimental to all building materials and should be used sparingly and with caution on Hanover® Pavers. If you do use any de-icing materials, be sure to clean the pavers, as directed above, under the General Cleaning of Pavers section. Contact Hanover® for recommended de-icing material. Do not use rock salts.
Unit pavers are designed to be a low maintenance investment. However, pavers may be sealed for preservation or color enhancement. A complete paver cleaning is suggested prior to sealing. Major stains must first be removed with specialized cleaner designed for the type of stain, followed by a cleaning of the entire area with a general cleaner. It is best to seal pavers soon after they have been thoroughly cleaned. Pavers and joints must be completely dry and free of oil, grease, dust, dirt, sand, efflorescence and frost. It is advised that sealers not be applied when temperatures are below 50°F. Hanover® Sealers softly enhance or deepen color depending on the type of sealer used. Sealers provide excellent protection from water, alkalis, acids, air borne pollutants and ultraviolet light, making pavers easier to clean.

Hanover® offers two types of sealers – Hanover® Intensifying Sealer and Hanover® Natural Sealer. Hanover® Intensifying Sealer is a solvent based sealer and will deepen the appearance of pavers while still allow the pavers to breathe, meeting VOC requirements in all 50 states. Hanover® Natural Sealer is a water-based sealer, which will enhance the appearance of the pavers, but not darken them like the Intensifying Sealer.

Hanover® Natural and Intensifying Sealers will:
• enhance and sharpen color
• protect against oil and dirt penetration on paver surface
• make surface easy to clean
• reinforce joints by keeping sand in place
• minimize erosion and weed growth
• environmentally compliant

For more information and before using these sealers, read all Data Sheets. Contact Hanover at 800.426.4242 or visit www.hanoverpavers.com.