



# CAMBRIDGE

SEEING IS *BELIEVING!*

**FREQUENTLY ASKED QUESTIONS  
+ MANAGING EFFLORESCENCE**

# FREQUENTLY ASKED QUESTIONS

## CAN PAVINGSTONES BE SEALED, AND IF SO ARE THERE ANY SPECIFIC GUIDELINES?

**Alliance Gator, our supplier of sealers and cleaners, recommends waiting 1 year before sealing, since the efflorescence bleeding process is unpredictable.** Before sealing any surface one must ensure that there is no efflorescence in the pavers. Efflorescence is a natural process. It is a condition which occurs in all cement based products, as well as in many other paving products. The condition will usually correct itself with time and exposure to the elements. Sealing is a personal choice based on aesthetic preferences, but is not necessary. Prior to sealing, the pavingstones must be cleaned with an efflorescence cleaner.

## DO YOU HAVE ANY TIPS ON REMOVING COMMON STAINS FROM CONCRETE PAVINGSTONES?

All pavements will stain, but when properly installed, interlocking concrete pavements have very low maintenance and will provide an attractive surface for decades. Under foot and vehicular traffic, they can become exposed to dirt, stains and wear. This is common to all pavements. The below tips address various steps to ensure the durability of interlocking concrete pavements.

Remember, one of the main advantages of concrete pavingstones versus asphalt or concrete is if a stain cannot be removed - the PAVER CAN!

*We received these recommendations from Alliance Gator, as well as from contractors. Cambridge Pavers, Inc. does not warranty or guarantee these cleaning methods will work and does not assume any responsibility for the actions of those attempting to clean. Prior to applying the suggested cleaning agent to a large area, test on one or two pavingstones to make sure you are satisfied with the results. If you can, please choose a paver in an area not easily seen.*

**Asphalt and emulsified asphalt** - Use Alliance Rubber, Paint and Tar Remover. Follow the directions and reapply if necessary. You can also try the following: chill with ice (if warm outside) and scrape away the excess with a hard plastic scraper. Apply Alliance XP Oil and Grease remover and follow directions on the container.

**Cutback asphalt & roofing tar** - Use Alliance Rubber, Paint and Tar Remover and follow the directions.

**Blood, candy, ketchup, mustard and grease drippings from food** - Use liquid dish soap and let penetrate 20-30 minutes. Scrub and rinse with hot water. You may also use Oxyclean mixed 4 scoops to a gallon of hot water. Let soak for 15 minutes, scrub with a nylon bristle brush, and rinse.

**Caulking** - Scrape off excess and scrub with a poultice of denatured alcohol and rinse with hot water and liquid dish soap.

**Acrylic latex caulk** - Use Alliance Rubber, Paint and Tar Remover or Alliance Eco Soy Stripper and follow guidelines for removal of dried paint.

**Chewing gum** - Same as caulking.

**Clay Soil** - Scrape off dry material. Scrub and rinse with hot water mixed with Alliance Shampoo.

**Creosote** - Apply a poultice with paint thinner and talc. Scrub and allow to dry. Scrape off and scrub with scouring powder and rinse with water.

**Efflorescence** - Use Alliance Efflorescence Remover. Dilute according to instructions on container. Apply and rinse with water.

**Leaf stains** - Use Clorox Pro Results Outdoor Bleach and follow the instructions for application. Of course- be sure to test one paver at a time. The cause of the problem is leaves which fall annually. This will continue to happen so a decision has to be made whether to live with or remove the tree.

**Wood rot, mulch or tobacco stains** - Use Oxyclean 4 scoops to a gallon of hot water. Apply and let soak for 15 minutes. Scrub with a nylon bristle brush and rinse with water. You may also use Pool Shock. Wet the entire surface to be cleaned then mix 1/2 lb of pool shock with 4 gallons of water. Apply, scrub, and rinse off.

**Mold and mildew** - Use Oxyclean or pool shock (follow same directions as above).

**Mortar** - Extremely difficult to remove. If mortar is fresh and not hardened, try Alliance Efflorescence Remover. Scrub and rinse with water. Reapply if necessary. It may be necessary to replace the paver.

**Oil or grease that has penetrated** - Soak up excess with rags and apply Alliance XP Oil & Grease Remover. Leave on for 6-8 hours till it dries to a powder and sweep off. Also works on antifreeze, brake fluid, hydraulic oil and citronella wax.

**Paint** - Fresh paint should be mopped up immediately with rags or paper towels by blotting. Do not wipe as this will spread the stain. Soak and then scrub the area with hot water, scouring powder and a stiff brush until no more improvement is seen. Let the remaining paint dry and remove as described below.

**Dried paint** - Scrape any excess oil based paint, varnish or water based latex paint off the surface. Use Alliance Rubber, Paint and Tar Remover or Alliance Eco Soy Stripper and follow the directions on the container. Another option is to purchase a commercial paint remover and follow the directions. Loosen with gentle scrubbing. Do not rub the loosened paint into the surface of the paver. Instead, blot up the loosened paint and thinner. Repeat as necessary. Note: latex paints once dried are more difficult to remove.

**Soot from smoke** - Use a solution of trisodium phosphate (TSP) diluted to directions on container. Scrub and rinse with water.

**Tire skid marks** - Use Alliance Rubber, Paint and Tar Remover or scrub the black area with water, detergent and scouring powder. In the case of small stained areas, removal and replacement of marred pavers may be an easier option.

**Rust** - Define the source of the rust stain (e.g.: sprinklers, patio furniture, fertilizers) and eliminate it to prevent reoccurrences. Apply Alliance Rust Remover and scrub with a stiff bristle brush. Multiple applications may be necessary. Follow directions accordingly. Test a small area of pavers first. Note: Rust Remover will damage a sealer.

## CAN PAVINGSTONES BE INSTALLED ON A CONCRETE BASE?

As long as the ICPI Construction details are followed.

## CAN PAVINGSTONES BE INSTALLED ANYWHERE INSTEAD OF ASPHALT OR POURED CONCRETE?

Yes. Choose Cambridge Pavingstones with value-added ArmorTec for any paving project. An interlocking Cambridge Pavingstones system will instantly improve your home's appearance and increase its appraised value. With dozens of shapes and colors to choose from, design possibilities for driveways, walkways, patios & pools, sunrooms and other areas are endless.

## HOW DO CAMBRIDGE PAVINGSTONES HOLD UP COMPARED TO ASPHALT AND POURED CONCRETE?

Cambridge Pavers are more durable. Interlocking pavingstones are an engineered pavement system and are used at airports, taxiways, container ports, industrial and corporate campuses as well as on streets for urban renewal projects.

## WHAT MAKES PAVINGSTONES SO STRONG?

They are made of high-density concrete. Cambridge Pavingstones are twice as strong as and less absorbent than poured concrete. The mortarless, flexible, interlocking system won't crack or heave as a result of ground movement. Ugly patches are a thing of the past.

## CAN ARMORTEC® COME OFF?

No. ArmorTec® and the paver are, in fact, one. ArmorTec®, also referred to as "hardfacing," has been field-proven for over 70 years in Europe, where pavingstone technology originated and continues to evolve.

## CAN PAVINGSTONES BE INSTALLED OVER EXISTING PAVEMENT?

Yes. Cambridge Pavingstones can be used as an overlay over existing concrete patios and walkways as well as asphalt driveways. Costs incurred for removal and disposal of existing asphalt or concrete are therefore eliminated. Follow ICPI guidelines.

## ARE PAVINGSTONES SLIPPERY?

No. Pavingstones surpass the standards for slip-resistance set by the Americans With Disabilities Act.

## CAN PAVERS BE PLOWED?

All pavements can be damaged by steel plow blades. ICPI recommends using a rubber-edged plow blade.

## CAN DE-ICING CHEMICALS BE USED ON PAVERS?

We recommend using sand as the preferred method for providing skid and slip resistance. If using de-icer we recommend only sodium chloride (NaCl). De-icer should be applied sparingly. Once loosened, snow and ice should be promptly removed to avoid a build-up in the concentration of the de-icing chemical. Do not use products that contain a blend of chemicals.

**Congratulations! You have recently improved your property with strong, colorful and attractive Cambridge pavingstones. As a proud owner, you have invested in a long-lasting, durable, yet flexible pavement that adds value to your real estate. A truly beautiful yet practical pavement graces your property. If your project is just about to begin, you can anticipate enhancing your property with the best paving system for your money.**

## WHAT IS EFFLORESCENCE?

There is a chance that after a few weeks or months pass, a white haze may appear on the surface of the pavers. This is known as efflorescence. It may appear randomly or in certain areas, and will be more pronounced on dark colored pavers. The white haze may give the impression that the color of the pavers is fading. When wet, the white disappears and the color of the pavers is enhanced. When they dry, the white haze reappears.

## EFFLORESCENCE IS COMPLETELY NATURAL AND WILL DISAPPEAR WITH TIME

There is no reason to be concerned that your pavers are damaged or defective. The concrete pavers are going through a natural process. It is a condition that occurs in all cement-based products, as well as in many other paving products. The condition will usually correct itself with time and exposure to the elements.

## WHEN WILL EFFLORESCENCE STOP?

When the supply of calcium hydroxide is exhausted. If you live in an area of frequent rain and sunny days, efflorescence and its passing may occur quickly. The process may take much longer in drier climates.

## WILL IT GO AWAY NATURALLY?

Since many factors are involved in its formation, it is difficult to determine when efflorescence will stop. Just as it appears naturally, efflorescence will eventually disappear. Over time, rainwater can wash and wear it away. In urban areas with acidic rainfall, efflorescence may go away faster than in rural areas.

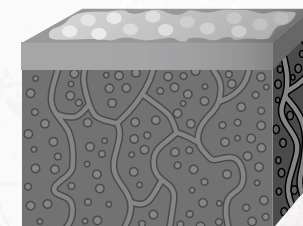
## CAN IT BE REMOVED WITHOUT THE WAIT??

Yes, efflorescence may be cleaned with commercially available cleaners formulated specifically for concrete pavers. Cleaning should be performed immediately after efflorescence has appeared. It may reappear as long as the chemical reaction continues and cleaning may need to be done until efflorescence has stopped.

Most cleaners contain acid and detergents, so be sure to follow all label directions and environmental regulations. Careless or improper cleaning can result in injury, damage, and discoloration to the surface of the concrete pavers. Always conduct a test in a small, inconspicuous area before applying any cleaner to the entire area of concrete pavers. After cleaning, the pavers should be completely dry and free from efflorescence prior to applying any sealers.

## THE CHEMISTRY OF EFFLORESCENCE

All concrete products contain cement which produces lime or water soluble calcium oxide. Lime can also be in the bedding sand, aggregate base materials, or soil. Although concrete pavers are solid, strong, and very dense, they contain millions of microscopic capillaries that run from the interior to the surface. Moisture from rain, sprinkler systems, underground sources, poor site drainage, or dew enters these microscopic capillaries. Calcium oxide inside the paver reacts with the water in the capillaries and forms calcium hydroxide. This rises to the surface, reacts with the carbon dioxide in the air, and forms a white haze of calcium carbonate. When moisture on the surface evaporates, the white haze of efflorescence becomes visible.



*Efflorescence emerged from pores within a magnified area of a concrete paver. The calcium has been carried to the surface by water.*

## ELIMINATING EFFLORESCENCE

Most producers of pavers put chemical additives in the concrete to reduce the likelihood of efflorescence. Completely eliminating the chance of efflorescence, however, isn't possible because it's a natural byproduct of hardened concrete. It will stop when no more calcium hydroxide is available to move to the surface. There are cleaners available that can remove efflorescence. These will enhance the natural beauty of your concrete paver project. Consult your paver supplier to find an appropriate cleaner.

## POLYMERIC HAZE

Polymeric haze from the use of polymeric joint sand may appear on your concrete products if the sand was not removed from the surface of the paver properly. This does not affect the integrity of the product or your installation. The hazing will weather away naturally with time and rain or it can be removed with a specialized cleaner. You are advised to contact your contractor. Cambridge Pavers, Inc. accepts no responsibility or liability for this occurrence.

*For more information, visit [www.cambridgepavers.com](http://www.cambridgepavers.com) or [www.icpi.org](http://www.icpi.org) (the trade association representing the interlocking concrete paving industry)*



## *Made in AMERICA*

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We are changing America's Landscape with Pavingstones and Wallstones! We want towns all over the United States to upgrade their sidewalks, downtown areas and municipalities with products that will outperform concrete and asphalt. We are allowing people to extend their living space beyond their four walls so that they can enjoy time with family and friends throughout the year. This is about something larger than a pretty driveway or patio. It is about an investment that makes people feel good about coming home or taking a walk in their local community. Our mission is to encourage positive change in the environments we utilize each and every day. We are proud to be a part of this change, one paver and one wallstone at a time.