



Efflorescence

Efflorescence is commonly identified as a white mark that sometimes occurs on Concrete Paving, on brick work and very occasionally on Natural Stone pavers.

WHY DOES EFFLORESCENCE OCCUR?

Efflorescence is the accumulation of crystallised salt on the surface of the paving. In the case of Concrete Paving, salts from within the cement rise to the surface of the paving where they accumulate causing a white mark. Efflorescence may also occur on Natural Stone products depending on the chemical composition of the stone and the local weather conditions.



Efflorescence is an unpredictable, but temporary, process. Once all the salt from the paving has risen to the surface it is commonly worn away through use or by weathering. This process seldom takes more than 12 months.

DOES IT ADVERSELY AFFECT THE PAVING?

Efflorescence does not adversely affect paving. It may, however, mask the surface of the paving.

HOW CAN EFFLORESCENCE BE REMOVED?

Efflorescence will naturally wear off through use and weathering, and under normal circumstances disappears within 12 months. Efflorescence may temporarily disappear when wet.

WHAT ARE THE OTHER OPTIONS TO REMOVE IT?

In most cases scrubbing the paving with warm, soapy water or a mild bleach solution will reduce the build up of salt from the surface of the paving. This breaks down the crystallised salt causing it to be more readily worn off through use and weathering.

In extreme cases of efflorescence, an acid wash may need to be applied to remove the salt.

It is important to note that the salt may again form on the surface of the paving if the efflorescence process has not finished. Consequently, acid washes should not be applied until the efflorescence process has concluded.

If you are considering acid washing to remove efflorescence, please read the Acid Washing section in this document.

Efflorescence does not structurally affect paving and is not covered by the Brett Product Guarantee.



Essential Maintenance Guide

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PAVING EXPERTS YOU CAN TRUST



Thank you for choosing Brett Concrete or Natural Stone Paving.

Our products are designed to provide an attractive and low maintenance surface, and if appropriately maintained will last for decades. To help you keep your installation at its best, we have put together this simple maintenance and cleaning guide.

TIP: When the installation has been completed, save some of the left over blocks or flags and put them in the garden so that they weather at the same rate as the installation. Should your installation become stained or damaged you will be able to replace the relevant section with the weathered blocks.

Concrete Block Paving and Jointing Sand

During installation of your paving, Jointing Sand is used to fill the joints between block pavers. The sand will compact over time; however, water flowing over, or through, the joints of a newly completed installation may wash away some of the sand. It is important to refill any lost sand during the 12 months following installation to maintain the structural integrity of the installation.

Jointing Sand is available from all good, local builders' merchants. We recommend using Brett Jointing Sand to guarantee that you are using a high quality product. A stabilising liquid may also be mixed with the sand to help prevent further loss. Please be aware that stabilising liquids may mark or damage the surface of the paving. Marking or damage caused by stabilising liquid is not covered under the Brett Product Guarantee. If using a stabilising liquid follow the manufacturer's guidelines and test on a small, inconspicuous area of the installation first.

Please note the above does not include permeable paving product as a specialist joint filling is required for the permeable paving range. See 'Specialist Care for Classico, Aura and Permeable Paving' for further information.

Cleaning Concrete Block Paving

In the months immediately following completion of the installation, only sweep the installation with a hand broom or brush.



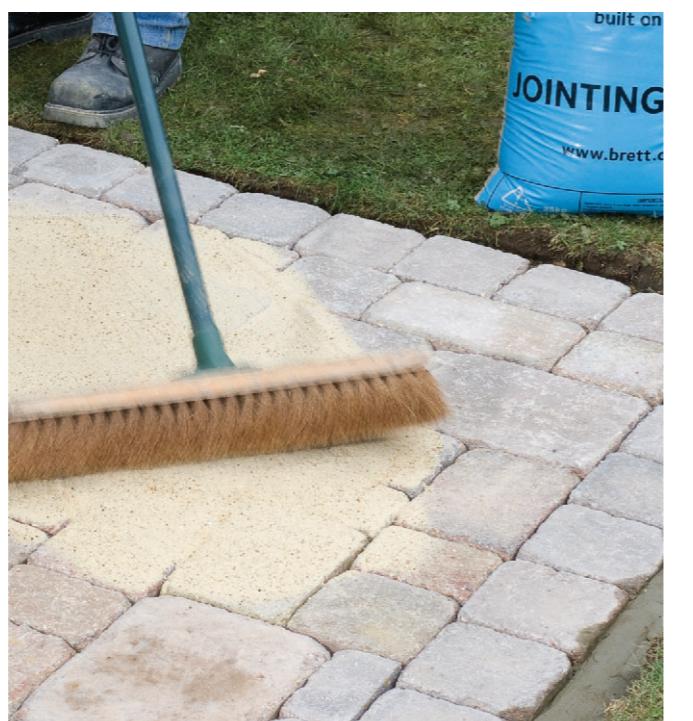
Use of equipment that vacuums or water blasts the paving may remove large amounts of Jointing Sand, reducing the structural integrity of the installation.

Specialist care for Classico, Aura and Permeable Paving

Brett Permeable Chippings are used with Classico and Aura impermeable pavers as these installations have larger joints. Jointing Sand is used to fill the upper part of the joint over the chippings. It is important to replace any chippings or sand lost from the joints during the 12 months following installation so that the paving settles correctly.

Joints in Permeable Paving, such as Omega Flow and Alpha Antique Flow paving, are filled solely with Brett Permeable Chippings. In all cases, loose chippings and sands should be swept back into the joints and topped up if necessary.

Brett Permeable Chippings and Jointing Sand can be purchased from your local Brett stockist. Contact us on 0845 6080577 to locate your nearest stockist.



Health and Safety

Some of the maintenance and cleaning methods described here employ the use of chemicals and other materials that can be dangerous if handled inappropriately. All safety information issued by the manufacturers should be carefully followed.

If in doubt, refer to the Health and Safety Executive before commencing work. You can phone them on 0845 345 0055 or visit their website www.hse.gov.uk

Dirt and Stain Removal

Dirt may be removed from the installation through sweeping or hand washing using warm, soapy water.

The following table offers recommendations for removal of the most common stains.



BEVERAGES Scrub with warm, soapy water. For more stubborn stains use a household bleach diluted with water to a 1:10 solution and then rinse thoroughly with clean water.

CHEWING GUM Freeze with ice cubes or an aerosol freezing agent before scraping off.

OIL Where oil has been allowed to stand for some time and is dry, brush on a proprietary engine cleaning fluid (available from most car accessory stores). Then wash away the emulsified oil with water. For recent wet stains soak up excess oil with paper towels or an absorbent cloth. Do not wipe, as this will spread the stain. Cover the area with a dry, absorbent powder, such as Portland Cement, and leave for 24 hours ensuring the area remains dry. Repeat until the powder no longer absorbs the remaining oil then carefully remove the powder taking care not to smudge it. Treat any remaining dry mark as above.

PAINT If wet, soak up excess paint with paper towels or an absorbent cloth. Do not wipe, as this will spread the stain. Then scrub the area with hot water and a household detergent. Dry paint can largely be removed by scraping.

TYRE MARKS Scrub the area with hot water and a household detergent.

RUST Use a proprietary rust remover or concrete cleaner.

MOSS & ALGAE Use a proprietary weed killer. These are most effective when applied during warm weather. The dead material can be scrubbed away after a few days. Always check acid content before application. See the 'Acid Washing' section for further information.

VEGETABLE OIL/FATS Scrub with hot, soapy water or mild detergent.

NOTE: DO NOT USE DE-ICING SALTS, POOL CLEANING AGENTS OR HIGH-PRESSURE WASHERS AS THESE CAN STAIN OR DAMAGE THE PAVING OR INSTALLATION.

Contact the Brett Technical Services line on 0845 608 0577 to discuss washing or stain removal options if you have any questions.

Acid Washing

In cases of severe staining, an acid wash may be applied to remove a stain. Care should be taken as incorrect application may etch, bleach or prematurely age the paving surface. Natural Stone and Decorative Concrete Flag Paving are more susceptible to these effects and results of acid washing could be aesthetically worse than the original stain. Therefore acid washing is not recommended on these product types.

Hydrochloric acid is the most common acid wash and can be obtained either as an industrial chemical or as a proprietary concrete cleaner. Always follow the manufacturer's instructions before applying the product. We recommend you take the following measures:

- Wear suitable protective clothing, including rubber gloves and face protection at all times
- Refer to the Health & Safety Executive for up to date advice on all safety measures (Tel: 0845 345 0055)
- Ensure metals and other materials that may be affected by acid are suitably shielded
- Typically, a solution of no greater than 5% acid content should be used
- Test the acid wash in an inconspicuous area first
- Dampen the concrete with water before applying the acid solution to assist its reaction with the surface layer
- The acid solution should be applied to the complete installation to maintain a uniform visual appearance
- After application, wash liberally with water to dilute any remaining acid

Acid Washing can fundamentally change both the aesthetic and the structure of the paving. We strongly recommend calling the Brett Technical Services line on 0845 608 0577 before undertaking this procedure.

Grit Blasting

Grit Blasting involves blowing abrasive grit at the concrete to remove the stain. The technique may remove several millimetres from the top of the paving and may significantly alter the paving texture and/or appearance.

Grit Blasting should only be performed by a specialist, professional blast cleaning service provider.

Please note: Brett Landscaping cannot be held responsible for any damage or injury that may occur as a result of using these cleaning and stain removal techniques. Incorrect application of these techniques will limit your Brett Product Guarantee. Please call the Brett Technical Services line on 0845 608 0577 if you have any questions regarding cleaning, the removal of stains or the Brett Product Guarantee.