



 **PavingDirect**

14 essential tips for
Natural Stone Paving

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14 essential tips for **Natural Stone Paving**

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BROWN SPOTS OR STAINING

1



Possible Causes

Iron Pyrites - Rust Spots coming from within the natural stone.

Solutions

- Lithofin Bero
- Lithofin Rust-Ex



FERTILISER STAINING – BROWN SPOTS/STAINING 2



Possible Causes

Moss killers and fertilisers contain Ferrous Sulphate which can leave iron traces on paving after over spread from lawns – Look for staining along edge of lawns or garden borders.

Solutions

- Lithofin Bero
- Lithofin Rust-Ex





Possible Causes

Brick acid, cement cleaner applied to the patio.

Solution

- Lithofin Bero



Example of paving before and after applying Lithofin Bero.



Possible Causes

Fallen leaves can stain the face of paving slabs. This is caused by resin leaching out of the leaf as it degrades.

Solution

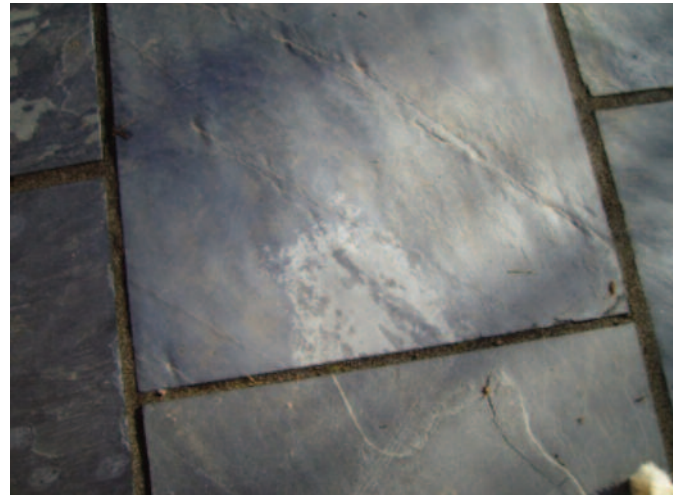
Sweep leaves off patio area regularly. The residue from the leaves are only surface stains and can be removed by cleaning.

- **Lithofin Outdoor Cleaner**



WHITE CIRCULAR SPOTS ON SLATE - BLOOMING

5



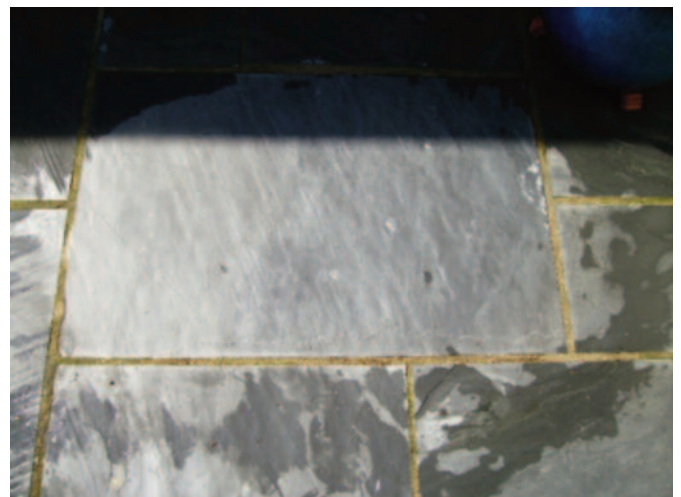
Possible Causes

These are calcite mineral deposits on the surface of the slate. Calcite makes up part of the natural formation of slate and can appear as white 'flaking/blooming' when exposed to oxygen and water.

Solution

The cleaning method involves aggressive cleaning or scrubbing with the below product.

- **Lithofin Builders Clean**





Possible Causes

Lime bloom coming through the paving from the cement based mortar bed. This is a natural phenomenon and can happen at any time, however it is more common when the 5 spot method has been applied. Look for sporadic staining.

Solution

There are efflorescence cleaners that may work, however the best advice is to allow the salts to dissipate with natural weathering and the passage of time.

- **Lithofin Builders Clean**



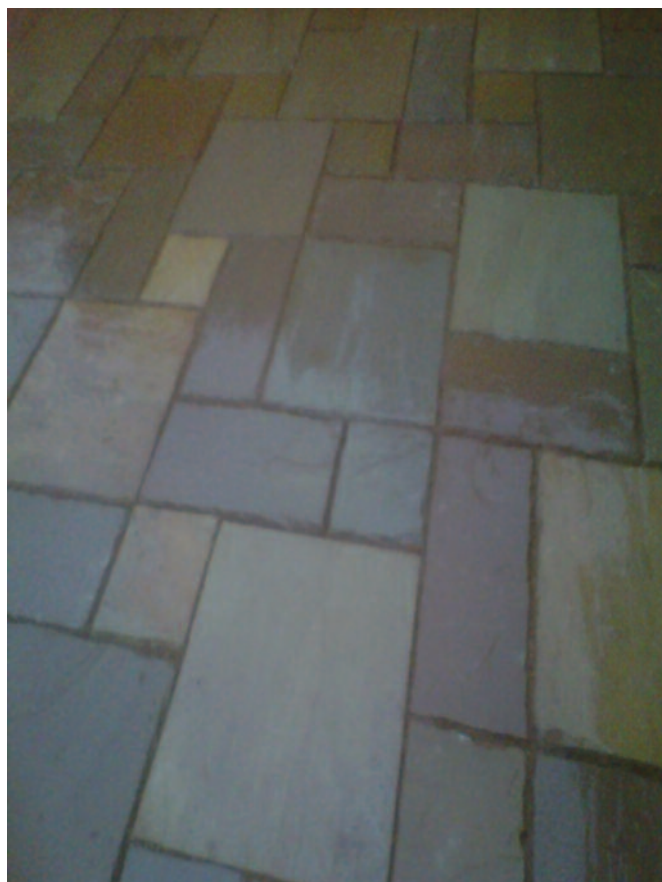


The 5 spots/dot and dab method of laying paving is not recommended by professional landscapers and can cause significant problems once the job has been completed. Any method of laying that leaves voids underneath the paving is an installation error and is prone to future problems.

- Voids fill with water and create subsidence or instability in the finished patio. The resident water pools under the paving cause staining in the face of more porous paving.
- Voids cause paving to fracture when loaded due to lack of support.
- Voids may become infested by insects or burrowing animals.
- The mortar spots cause paving to be unstable are more likely to rock when traversed.

Solution

Give advice only as it is an installation error and faults may come back.



Natural stone paving should always be laid with the chamfered edge down. When the paving is laid upside down, it creates a joint that is too wide. The V shape makes the jointing more susceptible to fall out or to crumble.

In addition, the underside of the slab can also be over riven, incorrect colouring or even unsightly.

Solution

Installation error so no further action required.



When paving or block paving is butt jointed (adjacent slabs touching each other) it can cause a number of issues.

- There is no cushion between pavers thus causing a high risk of spalling ie edges breaking up.
- There is no opportunity to disguise manufacturing tolerances
- A minimum 2mm joint should be standard practice for paving flags and block paving requires a sanded joint to allow some movement.

Solution

Installation error so no further action required.



Spacers not advised. Minimum 2mm joint.



Crossing points and long lines.

A consistent joint is difficult to achieve with natural stone due to the dimensional tolerances, therefore jointing spacers are not advised. Natural paving is best laid by the eye. Joints will vary with different products from 7 to 14mm on Traditional Paving to a minimum 2mm joint on Contemporary Paving.

Working from the centre outwards Circles should always be dry laid prior to installation to assure joints are correct.

Randomly laid paving should not consist of long straight lines or crossing points (where 4 corners meet).



No Manufacturer can guarantee that products from different batches will have identical colouration.

Therefore, it is advisable that when using several packs of the same product on a project, the product is used randomly from all of the packs so as to achieve an overall blended appearance.

How the paving should look when paving is mixed from all packs.



Possible Causes

After 2-6 months of being out in the open, exposed to UV light, slightly acidic rainfall and with natural weathering the Black Kadapha Limestone starts to fade to grey.

Solution

Depending on the look you require there are a number of sealants that can bring the Kadapha back to black (see above right picture).

- Lithofin MN Colour intensifier W
- Lithofin Stain Stop W





Possible Causes

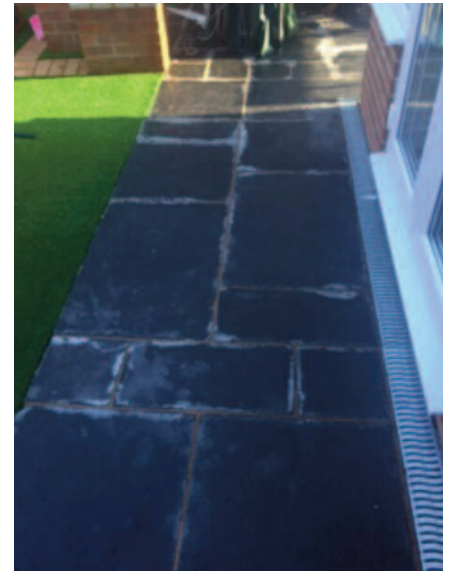
Poorly drained and shady/damp site conditions contribute to the growth of algae and lichen on paths and hard surfaces.

Solution

There are numerous Algae/Lichen proprietary cleaners available.

- Lithofin Outdoor Cleaner
- Lithofin Algex





In most cases, sealing Natural Stone is not necessary. It is personal preference of the consumer whether they want to enhance the colour of their patio or just protect the paving from staining. If you intend to use a sealer, you must adhere fully to the product instructions on the packaging.

New paving should always be allowed to 'weather in' for at least 6 weeks, preferably 12 before applying a sealant. Generally speaking, if there are to be any efflorescence, pyrites etc, they'll become apparent during those first few weeks, and so it makes sense to give the pavement a few weeks to see how it performs after installation.

The surface to be sealed **MUST BE DRY**.

Moisture on the surface, within the joints or even a bit of damp within the paving itself can cause some sealants to turn 'milky', effectively ruining the finished appearance. Those sealants sold as suitable for all surfaces (the jack-of-all-trades) tend to be more prone to this than some of the higher-end quality products.

The paving should be clean, dry, free from dust, detritus and organic material (weeds, mosses, algae, etc).

A small area must always be tested first.

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QUICK FACTS

Cleaning

- For Limestone and concrete only use Power Clean
- Always test small areas first
- Wear appropriate protective clothing
- Start with dilution of 1/10 and work down
- Wet slab and joints prior to applying acidic cleaners to avoid burning into pointing
- Avoid splashes on to garden furniture, buildings, plants etc
- Always clean the whole slab to avoid patches

Sealing

- New patios should be left at least 6 -12 weeks and must be totally dry before application, this is the contractors' responsibility.
- Sealants need to impregnate paving and all excess removed with a **white** towel
- All instructions must be abided by
- Test an inconspicuous area or preferably an unused slab prior to treating the whole patio.



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