

Site practice & troubleshooting
Lime Staining of Brickwork



Lime staining is often mistaken as efflorescence, however, it usually emanates from mortar joints and doesn't disappear when wet.

Like efflorescence it needs saturation to transport the material, in this case free lime present in mortar or concrete and, as the solution leeches out, it leaves the trailing effect shown above.

Prevention is better than cure and the following points should be considered before and during construction.

- Care when detailing structures with close contact to concrete or cast stone which may allow lime to migrate into the brickwork.
- Correct installation of dpc's/ dpm's.
- Protection from rainfall during construction.
- Fully fill mortar joints so no pockets are left in which water can collect.
- Avoid direct run-off from floor slabs.

It is often clear where work has been left for the day without covering and a line of lime bleed-out staining appears where a downfall of rain has triggered the process.

Sometimes around weep-holes in new buildings a trail of lime can be seen forming where water has emerged after picking up material from cementitious matter left in the cavity or from floor slabs etc. (see picture to right.)



To remove fresh stains, scrub using a bristle brush and water, taking care not to damage the face of the bricks. For stains that have been exposed for longer and have started to carbonate, forming limestone; hydrochloric based acid treatment is required. Pre-dampen, not saturate, the wall to minimise its suction. Carefully apply a proprietary brick cleaning solution with a paint brush to dissolve the lime, then lightly scrub with a bristle brush and water.

If it hasn't disappeared after 3 attempts there is unlikely to be a significant improvement with further applications and specialist advice should be sought.

Testing on an inconspicuous area is advised and all health and safety guidelines from the cleaning solution manufacturer should be strictly followed.

For further information or advice regarding this topic please contact Ibstock's Design & Technical Helpline on **0844 800 4576** or email technical@ibstock.co.uk

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