IRON STAINING OF CLAY BRICKS

Iron staining occurs on some "stock" bricks and on certain types of wirecut bricks, particularly those made with clays with a high iron content.

Iron salts form a discrete part of the natural resource clay materials. If, after production, the bricks are exposed to saturation in certain conditions iron salts will migrate to the surface, in much the same way as the common white efflorescence, where they oxidise to produce a stain that is usually brown in colour, very similar to rust.

If the stain remains only on the bricks then arguably the discoloration may not cause too much concern. However, it does tend to run, and very quickly discolours the mortar joint as well.

Work carried out over a number of years showed conclusively that saturation of immature brickwork is the main cause of the problem.

All findings suggested that if good site practice prevailed and bricks and brickwork were correctly protected until the mortar was mature, the problem of staining is virtually eliminated.

Hessian sacking is commonly used as protection but this is not waterproof and can, if saturated, be a source of staining, which can then be mistaken for iron staining.

Iron staining on bricks will often disappear, in time, by natural weathering. It does not, however, disappear and reappear like "white efflorescence" and for this reason many would consider it a more serious problem because of its continuous unsightliness.

On mortar joints the simplest method to quickly improve the appearance, is to clean the joints with a half round file. This readily removes the stain from the joint and restores the brickwork profile.

If total cleaning is required, the use of any propriety brand of brick cleaner, used as part of the normal cleaning down process, will remove the stain and any minor staining reoccurring should be allowed to weather away naturally.

For further help and advice contact the **Design & Technical Helpline** on **0844 800 4576**.

Issue 7 Jan 2010

IBSTOCK® building sustainability