

SITE PRACTICE AND TROUBLESHOOTING VANADIUM STAINING/EFFLORESCENCE

WHAT IS VANADIUM

One of the mineral elements found in the raw material of clay bricks is 'vanadium' which normally only occurs as a complex salt in fire clays used in the production of buff coloured products. It can however, on very rare occasions, also occur in red and brown products.

CAUSE & EFFECT

Like most soluble salts it requires saturation to bring it to the surface when it appears as a yellowish stain that may change to a greenish or even light brown colour.

Vanadium does not come and go in the same manner as a white efflorescence and should really be described as a stain.

The discoloration is only on the surface of the brick but its intensity and the speed at which it can appear during construction can be a cause of concern for the user.

PREVENTION

Vanadium staining can be largely avoided by the protection of bricks and newly built brickwork to avoid saturation. The first 72 hours after laying, brickwork is most vulnerable to the elements as mortar is still undergoing the hardening process.

The stain will disappear in time due to the effect of normal weathering and should not return.

REMEDICATION

Under no circumstances should a standard acidic brick cleaner be used as this may "fix" the stain and turn it brown in colour.

Once the structure is watertight, if removal of the stain is required manually, brush on an oxalic acid solution (100g/litre) and, when the stain is bleached apply a washing soda solution (12g/litre) and leave on the wall.

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



It is important to stress that the hardening of the mortar joints and the protection offered within a completed building will eliminate any repetition of the problem.

Note : Although the instructions contained in this publication and any other information published by Radha-krishna Bricks Industries are indicative and strictly for guidance only. RKBI accepts no liability in relation to their use or for any losses, what so ever caused. The Buyer is fully responsible for taking all reasonable steps and safe guard the use of the products.

For further information please contact

R.K. House, Opp. Power House, Godhra. 389001. India. | T : +91 2672 260261 / 262854 | M: +91 98250 48755 | +91 98254 22020
E : jagdish.katiya@gmail.com | info@radhakrishnabricks.com | W : www.radhakrishnabricks.com