

Colour variation in brickwork

Clay bricks can vary slightly in colour from batch to batch for a variety of reasons including clay mix, sand/stain colour and small differences in firing conditions. Like other products such as wallpaper, carpets etc, it is important that the total quantity required is ordered and preferably delivered at one time and discussions with the supplier should take place to ensure that individual properties are built with bricks from the same batch. Delays in placing total orders and accepting deliveries may result in colour variation.

It is for these reasons that the British Standard Code of Practice for the use of Masonry BS5628: pt 3: states that "To achieve a good blend, units should be loaded out from at least three packs. It is advisable to draw from the packs vertically rather than horizontally" therefore reducing the occurrence of 'banding'. If mixing is maintained within deliveries and between deliveries, there should not be a problem.

Comparing deliveries against the site reference panel will highlight unacceptable variations. However, for a variety of reasons, instances of unacceptable colour 'banding' do occur. All brick-work should be viewed from a minimum distance of 3 metres.

Firstly it is necessary to ascertain what exactly has caused this effect. Sometimes it is not the colour of the brick which causes a 'patchy' appearance, but in fact, the mortar.

Mortar of differing strengths or of variable ingredients will dry to a different colour. This can cause an optical illusion making the bricks appear a different colour when in fact they may be consistent with surrounding brickwork. To further illustrate this, mortar of differing colours can be used in a variety of ways to create stunning effects. This photograph below shows a pattern created solely by changing the colour of the mortar. The bricks are the same but the visual effect appears to show different coloured bricks being cleverly built in to create geometric patterns.

To remedy serious colour variations the colour of brick and mortar can be changed by a method known as tinting.

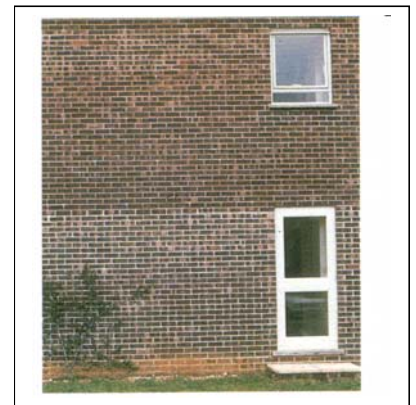
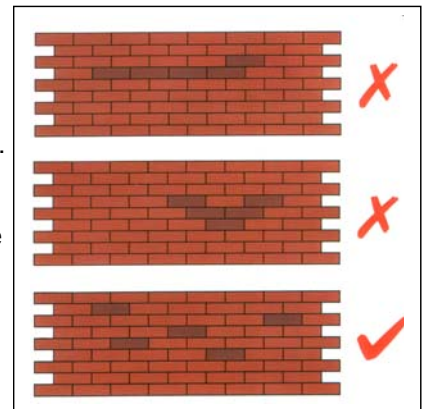
It is the technique of applying colour-fast pigments to give a permanent tint to the surface of brick masonry.

Tinting has proved successful for well over fifty years and, although initially developed for use on clay bricks, has subsequently been applied with equal success to a variety of materials including all types of fired clay, concrete bricks/blocks, calcium silicate bricks, mortars and natural stone.

The materials tinted are not required to remain the same over a long period of time. Indeed it is a necessary characteristic of the treatment that it allows the substrate to weather at a similar rate to the surrounding un-tinted materials, thus maintaining a consistent appearance. Consequently the tinting materials are normally quite thin and ideally soak into the surface onto which they have been applied.

Tints should be used with care as incorrect mixing and application could lead to brickwork being spoiled. Specialist contractors should be employed to carry out such treatments as their wealth of experience will lead to a more sympathetic blend between treated and untreated brickwork.

Consistent and thorough mixing of products on site, whether it be mortar materials or bricks, will minimise the necessity for remedial tinting and should be an important factor in good site practice.



The effect that a different mortar mix can have on finished brickwork.



For further help and advice contact the Ibstock Design & Technical Helpline on 0844 800 4576 or email technical@ibstock.co.uk.

Issue6, Jan 2010