Cleaning of Calcium Silicate Brickwork

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It is just as important with calcium silicate materials as it is with clay products, to ensure that bricks and brickwork being built are adequately protected from excessive wetting by rain and snow.

Where calcium silicate brickwork has been allowed to become saturated over a long period during construction, light buff-brown stains may appear on the surface. These stains are likely to be more visible on light-coloured bricks.

They will become less noticeable as the masonry dries out and should weather away early in the life of the building.

Removal Of Mortar Staining

Mortar staining can mar the appearance of finished brickwork, but incorrect cleaning techniques can cause permanent damage and may often do more harm than good.

Any proposed method of cleaning should be tried out on a small unobtrusive area of brickwork (and if acid cleaning is used, must then be left to dry out) so that the results can be assessed before the entire cleaning operation is carried out.

Specialist advice should be sought if the trial results are unsatisfactory.

1. Attempt to remove the larger pieces of mortar using a wooden scraper and/or stiff-fibre brush. Do not use metal tools, as these will almost certainly damage the bricks.

2. Attempt to remove any residual pieces of mortar or surface mortar staining by lightly abrading the surface using a spare brick of the same colour.

3. As a last resort, a proprietary hydrochloric acid-based brick cleaning solution may be used.

THIS WILL RESULT IN A PERMANENT DARKENING OF LIGHT-COLOURED CALCIUM SILICATE BRICKS.

THE WHOLE OF THE BRICKWORK MUST BE TREATED IN THE SAME WAY TO AVOID A 'PATCHY' APPEARANCE.

Where coloured mortars containing pigments have been used, the pigment may not be removed by hydrochloric acid and specialist advice from the mortar supplier should be sought.

The brickwork to be treated should be dampened thoroughly with clean water until the wall surface is just visibly wet, in order to reduce the suction of the masonry and so confine the chemical action to the surface.

Soaking of the masonry, such as by flooding it with a hosepipe, should be avoided.

Cautiously, apply the acid-based cleaning solution (which should be no stronger than 5% or 1:19 concentrated acid:water by volume). Always follow the manufacturer's instructions.

The operatives must wear suitable protective clothing and face protection.

Adequate ventilation must be provided if working indoors or in confined spaces.

Ensure that adjacent features (such as metal window frames etc) and the area at the foot of the wall are protected from the acid.

Gentle scrubbing with a stiff-fibre brush may be necessary to remove persistent mortar stains, but care must be taken to avoid eroding the bricks.

Wash down the treated brickwork with clean water as soon as possible after cleaning each section, but do not saturate the bricks.

This advice is based on practical experience and published guidelines over many years, but where, after trials, these methods are not satisfactory, specialist advice should be sought from a professional cleaning contractor.

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