



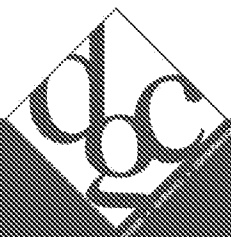
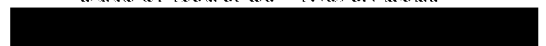
**SPECIFICATION FOR:
REPOINTING OF BRICKWORK**

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INSTITUTE · OF · HISTORIC ·
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Repointing Brickwork

Mortars

Hydraulic lime shall be natural hydraulic lime, NHL3.5 or to BSEN459:1995 as appropriate.

or

Lime putty shall be high calcium white lime to BS890 matured for a minimum of 3 months, delivered in sealed containers and kept under water seal until required for use. Lime putty to be mixed with evenly graded sharp sand using a paddle mixer, or similar and approved and allowed to rest in air tight containers for a minimum of 14 days. At time of use the mortar is to be re-worked, using a paddle mixer or similar and approved until fatty. No additional water to be added as this will not improve the workmanship of the mortar, instead the mortar will be reduced in strength and could result in failure of the mortar.

Pre-mixed "coarse stuff" purchased from Chalk Down Lime or similar and approved can be used however the mortar should still be re-worked as previously described.

Mortar for bedding and pointing:

1 : 2.5 - 1:3: Lime : Evenly graded Sharp Sand (not marine), strength of mortar dependent upon durability of masonry.

Admixtures and masonry cement will not be permitted.

Sand

The sand for mortar shall be clean, naturally occurring sharp pit sand, or crushed rock or gravel in accordance with BS1200 well graded in the range 3.5mm to 75µ with a good proportion of sharp grit to aid adhesion. Sand should be washed clean of loam and clay.

Water

Water shall be clean and pure, free from acid, salt, dirt or other contamination or deleterious material obtained from the mains supply.

Protection

Protect all new and adjacent work to prevent damage by weather, impact or staining during site operations.

Protect remaining works from damage or collapse.

Dispose of all builder's debris and cart away from site to Local Authority tip.

Cut out joints using quirks, chisels and tooth masonry chisels. Cold chisels may wedge joints and should not be used. Mason's needle gun may be used with the Contract Administrator's written permission. Operators will have to demonstrate their competence using a needle gun to the Contract administrator's satisfaction. The vibratory pressure should be kept as low as possible and chisels very sharp. In all instances chisels will not exceed 12mm across the cutting face.

Joints should be cleaned out to a minimum depth of 30mm or not less than their width, whichever is greater. Wide joints, over 30mm should be cut to a minimum depth of 38mm. Where mortar has disintegrated, and the joints are empty they should be deep tamped to fill the mortar joint to the required depth for pointing. If mortar, when tamped, finishes less than the required depth of cutting out for repointing, it should be cut back as necessary for repointing.

Impact, when cutting out should be at an oblique angle to the joint face, not direct into it. Great care should be exercised to avoid cutting out into the masonry or increasing the joint width. Cutting out should leave a clean square face at the back of the joint for optimum contact with the new mortar.

Specification of Repair: Repointing Brickwork

The joint should be carefully cleaned out with a bristle brush, adequately stiff to remove loose material, and flushed out with clean water. All loose material must be removed from the joints before filling can commence. This operation is to be carried out from top to bottom avoiding cross contamination.

Where the joints are colonised with algae or lichens, a biocide must be used on the dry surfaces during the cleaning out. Residue from the chemical treatment will be washed away with clean water, again working from top to bottom.

If the joints are dry, they should be re-wetted before placing new mortar to prevent rapid drying out taking place.

The mortar is to be pushed into the joint from a spot board and ironed in using the maximum possible pressure. Pointing irons are to be used to carry out this operation. Iron to be pushed into the joint particularly in irregular works, do not try and achieve compaction from the surface alone.

The mortar face should be filled slightly recessed, to avoid spreading mortar over the stone faces. Finished work should be protected from direct sunlight to avoid rapid drying.

Provide a weathered appearance to the exposed surface by tooling back and or stippling with a bristle brush to expose the aggregate after the initial set has taken place. Do not use a wire brush or scour or mark the final set.

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