

SPECIFICATION FOR MORTAR & POINTING WORKS 01.



MORTAR & REPOINTING

1.0 Mortar Specification

Although the pointing/mortar mix will be finalised following consultation with the local authority, it is anticipated that the mix will be:

1 part natural hydraulic lime (probably NHL 3.5, possibly NHL2).
3 parts well graded aggregate (predominantly washed building sand of appropriate colour with the inclusion of Mersey Grit or similar).

For high level mortar works, e.g. to chimneys and parapet copings where resistance to freezing and thawing actions is desirable, the suggested mix will be:

1 part natural hydraulic lime (NHL 5)
3 or 2½ parts well graded aggregate (predominantly washed building sand of appropriate colour with the inclusion of Mersey Grit or similar).

A mix of 1 part natural hydraulic lime (NHL3.5) to 2 parts of well graded aggregate (predominantly washed building sand of appropriate colour with the inclusion of Mersey Grit or similar) is also acceptable for copings and cappings.

Because a hydraulic mortar is being used, the joint is to be finished flush as work proceeds (i.e. joint profile: flush). A small pointing trowel will be used to trim away any surplus mortar and to expose the arrises of the brickwork. The joint faces can then be 'hammered' using a stiff brush to compact the face and slightly expose the aggregate.

2.0 Re-pointing Investigation and Assessment

Following the establishment of safe access, the brickwork and mortar joints will be inspected. The condition at high level and at stacks is anticipated to be worse than lower down due to the high degree of exposure, leading to water, frost and vegetation damage. The primary purpose of the inspection is as follows:

- To check whether inappropriate (cement based) repointing has been carried out in the past.
- To check the condition, depth and joint profile of the mortar, and the condition of the brickwork arrises.
- To check the ease of removing the mortar, using hand tools such as a flat bladed quirk and 2kg masons hammer. The possibility of using a small grinding disc will be considered on wider dense joints, to form a central slot into which the mortar can be collapsed using a hand chisel. Very loose material will be assessed for removal by raking out using a bent spike or similar.

3.0 Cutting and Raking Out

Following the inspection described above, the joints will be cut or raked out, to an anticipated depth of 25mm to 38mm (max). The mortar will be taken back to a square face and the joint cleaned out using a mains pressure hose as work proceeds. Care will be taken to avoid damage to the masonry arrises, and any bricks that have been severely damaged by frost, water etc. will be removed and a matching reclaimed brick will be let-in using a bedding mortar mix of 1 part natural hydraulic lime (NHL 3.5) and 2 parts well-graded sand.

4.0 Repointing

Although the pointing-mortar mix will be finalised following consultation with the local authority, it is anticipated that the mix will be:

1 part natural hydraulic lime (probably NHL 3.5, possibly NHL2).
3 parts well graded aggregate (predominantly washed building sand of appropriate colour with the inclusion of Mersey grit or similar)

For high level repointing works, e.g. to chimneys and parapet copings where resistance to freezing and thawing actions is desirable, the suggested mix will be:

1 part natural hydraulic lime (NHL 5)
3 or 2½ parts well graded aggregate (predominantly washed building sand of appropriate colour with the inclusion of Mersey grit or similar).

A mix of 1 part natural hydraulic lime (NHL3.5) to 2 parts of well graded aggregate (predominantly washed building sand of appropriate colour with the inclusion of Mersey grit or similar) is also acceptable for copings and cappings.

All joints will be pre-wetted prior to repointing. Mortar will be packed firmly into the back of the joint using a pointing key of appropriate width for the joints. The joint will be packed and built-up until full. A trowel is not to be used for filling the joints. Because a hydraulic mortar is being used, the joint is to be finished flush as work proceeds (i.e. joint profile: flush). A small pointing trowel will be used to trim away any surplus mortar and to expose the arrises of the brickwork. The joint faces can then be 'hammered' using a stiff brush to compact the face and slightly expose the aggregate.