
Guidelines for Repairs to Traditional Buildings

All repairs should be carried out in accordance with the following standard specifications unless otherwise agreed in writing with the Peak District National Park Authority.

(a) Mortar

Repointing, mortar flashing and rebedding masonry, ridge tiles or coping stones should be in a lime mortar mix using only natural hydraulic lime or non-hydraulic lime putty. No cement should be added.

For the hydraulic lime option, a feebly or moderately hydraulic lime (NHL 2 or 3.5) should be used in a 1:3 or 1:4 proportion of lime to aggregate depending on exposure and the nature of the stone.

For the non-hydraulic lime option, a 1:3 proportion of lime putty to aggregate is generally used.

Please note however that for external use the mix will require a pozzolanic additive, as non-hydraulic mortar takes longer to set and is more susceptible to frost damage.

In all cases, the manufacturer's recommendations and advice over mixes should be followed. The mix should also be agreed with the Building Conservation Officer prior to work taking place.

Aggregate should be matched against the existing mortar and have a good range of particle sizes. Wider joints demand a higher proportion of sharp (or grit) sand over building sand. Other types of aggregate such as limestone dust or brick dust can also be added to give the correct colour or texture match, provided that the overall proportion of the mix remains the same.

Sample panels should be used to determine the most appropriate mix.

This work is very straightforward for those with training and experience in good conservation practice. Further information about lime in buildings is available from the Building Conservation Officer.

(b) Repointing

Repointing is only needed where mortar has become so loose, powdery, decayed or eroded that water has started to penetrate joints. Finished pointing should be indistinguishable from sound sections of the wall. Joints should be carefully raked out manually to a depth of between one and a half and twice the width of the joint, and flushed out with clean water. Cutting out joints with mechanical discs is not acceptable. Wet the masonry prior to repointing. Joints should be solidly filled with mortar as far back as possible and then brushed back with a stiff bristle brush to expose the aggregate and the edges of the adjacent masonry. Joints should never be struck, finished proud of the masonry, or feathered over the edge of the stonework. Instead the mortar joint should be slightly recessed or flush. Where the masonry is eroded the face of the mortar should be kept back to the original

thickness of the joint. The work should be sprayed down at the end of the day. It should also be adequately protected during its initial set by means of wetted hessian. Where there is a risk of frost this should be supplemented with a plastic sheet and a further layer of hessian.

(c) Masonry

Defective masonry should be carefully cut out. Any replacement stone or brick should match the original in composition, dimension, form, coursing, colour and finish. The face of new masonry should be dressed to match existing. The source of any new stone or brick should be approved by the Building Conservation Officer.

(d) Render

Where internal or external render is in good condition, a new coat of limewash will consolidate the surface. New render must match the original in surface finish as well as in composition. Where the render to be removed is modern, a traditional lime render mix should be used for its replacement. As with mortars, renders should be of lime mixed with aggregate which has a good variation of particle sizes. No cement should be used in the mix.

(e) Slates: Stone Slates; Blue Slates; Westmorland Slates

Existing slates should be re-used wherever possible. Any shortfall should be made up with matching new or sound second-hand slates of the appropriate type, colour and thickness. Diminishing coursing or local patterning should be retained. Imported slates should not be used. The detailed specification for the re-roofing should be agreed with the Building Conservation Officer.

(f) Tiles

Existing tiles should be re-used wherever possible. Where replacements are needed on an existing roof, they should be second-hand and match the existing tiles as closely as possible. Where new tiles are required they should be as close a match as possible to the existing. The detailed specification for the re-roofing should be agreed with the Building Conservation Officer.

(g) Thatch

Thatch should be repaired rather than replaced. Where the thatch has deteriorated beyond repair, re-coating over the base layers should be carried out. In parts of the country where buildings are seldom stripped back to the timbers, smoke-blackened mediaeval thatch still exists. Every care must be taken to preserve this material. The material and style of thatch particular to its region should be continued, and the importation of styles and materials from other areas should be avoided.

(h) Roofing Felt

Roofing felt should generally be not be used when re-roofing farm outbuildings. It is preferable to leave the underside of the slates or tiles exposed or to apply lime mortar as torching.

(i) Roof Timbers

All existing roof timbers of historic value should be retained. The Building Conservation Officer should be notified immediately if it is discovered during the course of the work that any main timbers require attention. This applies to trusses, ridges, purlins, main beams and pegged rafters. Where repairs are needed the method must be agreed with the Conservation Officer. On no account should such timbers be replaced without the Authority's agreement. If replacement is agreed, it is likely that matching timber of a similar section will be required. Second-hand timber can be used where appropriate and following agreement with the Building Conservation Officer.

All timbers should be treated against attack by wood-boring insects. Organochlorine woodworm killers (mainly Lindane) must not be used as they are toxic to bats and other mammals. Instead synthetic pyrethroid insecticides, such as Permethrin and Cypermethrin, should be used.

(j) Leadwork

All flashings, soakers, cappings, valley and gutter linings and other weatherings should be in lead, to the weights and details recommended by the Lead Sheet Association, as described in the "Lead Sheet Manual".

(k) Rainwater Goods

Existing cast iron or timber rainwater goods should always be repaired and made good rather than replaced. Any new or replacement rainwater goods should match the original material and pattern. Gutters and downpipes should be painted black or a colour which tones in with the walls.

(l) Doors and Shutters

Original doors and shutters should be retained wherever possible. Where they are beyond repair, replacements should be exact copies of the originals, replicating for instance the moulding (or absence of it) where verticals boards are butted together. Frames should not be introduced where the door or shutter closes directly against the reveals of a stone surround. The timberwork should have an opaque finish of paint or stain in an agreed traditional colour. The existing ironwork of hinges and pins should be reused wherever possible. Where iron pins have eroded and cracked the stonework, they should be reset in a lead sleeve into the replacement stones or be replaced with new pins of the same pattern made in non-ferrous material metal.

(m) Windows

Original windows should be repaired or, if too decayed, renewed on an exact like-for-like basis. Where windows are being restored to a more appropriate design, they should be single glazed to a traditional pattern and traditionally detailed. Frames should be kept to the minimum size possible and glazing bars should generally be slender, with a profiled section internally if this occurred on the originals. Putty or mastic should be used to fix the glass rather than timber beads. Any opening casement should have flush or inset frames rather than storm-proof detailing. Where frames are recessed they should be set back to the original measurement within the openings.

(n) Floors

The floors of old buildings may retain archaeological deposits and artefacts which reflect their past use. For this reason, wherever possible, original floors should remain undisturbed. The Building Conservation Officer should be notified of any proposals to remove or replace original floors, as it may be necessary for archaeological monitoring of such works to be arranged. Similarly any proposals to introduce new services (e.g.drainage) to traditional buildings should be agreed with the Building Conservation Officer.

Original floor coverings often still exist under layers of concrete. It is possible with care to remove the concrete without too much damage to the materials below – these can then be repaired as necessary. First floor repairs should be carried out with boards of matching material, width and thickness. Every effort should be made to retain first floor beams and joists. Repairs to their bearing ends are often all that is required.

Lime ash or chalk marl floors should be retained, and repaired where necessary. Where the original floor cannot be kept, a new matching lime ash or chalk marl floor should be laid.

(o) General

Features of past farming practices should not be overlooked. Items such as dove holes and owl holes are often a design feature of the building and should not be removed or compromised during the course of repairs.

(p) Wildlife

A range of wildlife can be associated with traditional buildings including plants, insects, birds and other animals. A number of these species are protected by law and it is important to ensure that any proposed restoration works will not disturb them. All birds in the UK are protected during the nesting season. Bats, Great Crested Newts and Barn Owls, including their roosts or resting places, are all highly protected and further advice should be sought from the Authority or English Nature. Licences will need to be obtained where works might affect protected species.

This guidance is given for general advice only and may not be appropriate to all situations. For more details and site specific advice please contact the Conservation Service on 01629 816270 or email farming@peakdistrict.gov.uk.