

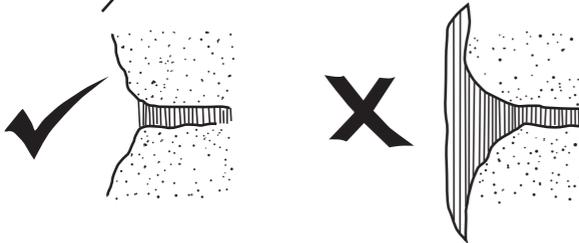
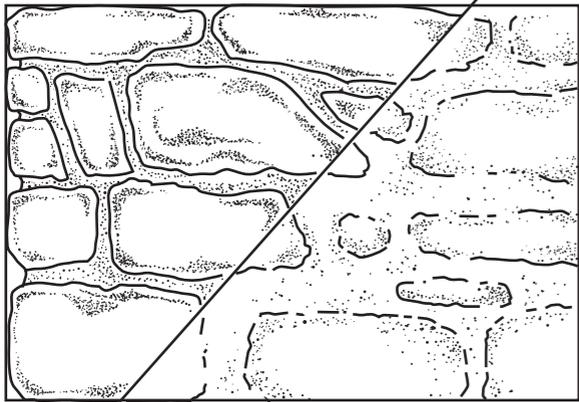
## (ii) STONEMWORK POINTING

### Ashlar Stonework -

For ashlar or finely jointed masonry, pointing is generally not recommended. Forcing mortar into these gaps is likely to be unnecessary and will harm the overall appearance of the wall.

### Random Rubble Stonework -

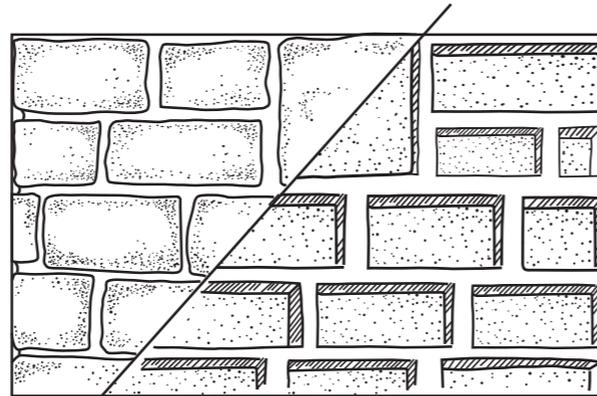
Mortar should be slightly recessed within the joints and should not spread over the face of the stones.



### Coursed and Dressed Rubble Stonework -

Joints should be flush or slightly recessed. Strap pointing or prominent ribbons of hard edged cement over the stones should be avoided.

Strap pointing causes the retention of water against the stone faces and is harmful to the appearance of a traditional Moorlands stone wall face. It is only possible to apply with the strongest cement mixes and therefore prevents the easy outward passage of moisture through the wall.



*Show off the local stone - not the joints!*

When the mortar begins to 'go off' its surface should be lightly stippled with a stiff bristle brush. This gives a slightly roughened finish bringing the aggregate to the surface.

## 5. Patch pointing

Limit the amount of pointing to only the areas where it is really necessary. Even if the original materials are used in the mix, the new mortar may stand out. To overcome this the mortar can be toned to suit either when mixing or after application using natural pigments. Test samples should be carried out beforehand to achieve the required colour.

## 6. Health and Safety

Great care must be taken when using both hydrated and hydraulic lime. Both are classed as an irritant and there is a serious risk of damage to eyes and skin. It is recommended that suitable gloves, overalls and eye/face protection are worn when handling the material.

## General

Pointing should not be carried out in frosty conditions or where there is a danger of frost. This will cause the water content in newly applied mortar to freeze and expand, pushing new mortar out of joints. If applied in hot weather there is a risk of premature drying and shrinkage. The pointing must be covered to keep the mortar moist and allow the natural setting time to be achieved.

Pointing is best done as one complete task once all other building work is finished. This avoids a patchy appearance although work should be confined to areas requiring attention.

Traditional re-pointing of historic buildings in the Moorlands may be eligible for grant assistance. \*Grants will only be made where a sample panel is approved before work starts and where the work meets the standards recommended in this leaflet.

\* You must apply and receive a written offer of grant before work starts.

## Further Information

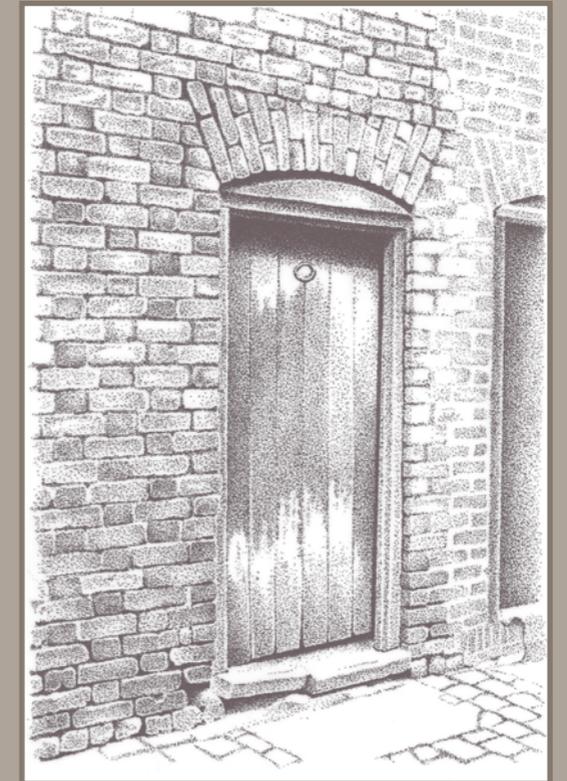
If you would like further information, please contact Conservation at Staffordshire Moorlands District Council, Moorlands House on 0345 605 3014. Contact us at [www.staffsmoorlands.gov.uk/contact](http://www.staffsmoorlands.gov.uk/contact) web [www.staffsmoorlands.gov.uk](http://www.staffsmoorlands.gov.uk)

**Staffordshire Moorlands District Council,  
Moorlands House, Stockwell Street, Leek,  
Staffordshire, ST13 6HQ**



*Available in alternative formats on request*

# Pointing your Jointing



# Why the need for pointing?

## Pointing your building properly is of vital importance.

This leaflet provides guidance on the correct mixes and methods for re-pointing the traditional brick and stone buildings of the Staffordshire Moorlands.

Loose or crumbly pointing lets moisture into the wall through the joint. Damage to plaster and timberwork quickly follows and eventually the wall will become unstable.

Traditional pointing is done using a mortar mix of lime and sand, a time proven practice we recommend today. If a cement based mix is used, particularly on an old building, damage may be caused to brick and stonework and it may speed the rate of decay in the wall. The incorrect application of such a mix can also severely harm the appearance of traditional brick or stone structures.

## When to point

Repointing should only be carried out when necessary and confined only to areas that need it.

If the exposed mortar surface is soft, loose and crumbly and can be scraped or pulled out easily, repointing is essential. If the mortar is firm but slightly recessed it is best left untouched.

Pointing that needs a chisel to remove it should also be left alone except where hard cement pointing is damaging the softer stone or brickwork. If damp is already present in the building but the mortar in the joints is sound, repointing will not solve the problem.

## How to point

Good pointing depends on preparation, mortar mix and method. For the traditional buildings of the Staffordshire Moorlands, there are right and wrong ways to start and finish brick and stone pointing.

### 1. Prepare the joints properly

Joints should be carefully raked out to a depth of not less than twice the height of the joint for both stonework and brickwork. A screwdriver, chisel or spike is a suitable tool. Care must be taken to keep the edges of the stone/brick intact and joints should never be widened. If the joints are very fine, a hacksaw blade can be used. Power tools should never be used because of the difficulty of controlling the cut and the danger of damaging surrounding bricks or stones.

When raking out is complete, all loose material should be brushed or gently washed out of the joints. Washing out also helps new mortar to bond to the joints and prevents it from drying out too quickly.

### 2. Finding the right materials

#### (i) SAND

Sand or aggregate should be clean, well graded 'Sharp Sand'. The size of the aggregate to use will depend on the size of the joint to be pointed. Generally the larger the joint the coarser the aggregate used in the mortar mix. The colour of the sand used in the mix will determine the final colour of the mortar; it should compliment or match the colour of the bricks or stone. Red sand can be mixed with yellow sand to match the pink colour of some local stones. Crushed brick or stone dust can also be used to produce a coloured mortar. The addition of such materials will also speed up the setting time of the mortar.

#### (ii) LIME

Lime Mortar is a proven traditional material. There are two types of lime, hydrated and hydraulic. Hydrated lime relies on carbon dioxide in the atmosphere to set and therefore cures at a slower rate This makes it eminently suitable for pointing. Hydrated lime is available in tubs as a putty. Pre-mixed hydrated lime mortar is also available from specialist outlets. Hydraulic lime has a quicker setting time making it more suitable for building. Hydraulic is available in powder form in bags. If purchasing lime in bags ensure that it is freshly made. When mixed correctly both limes will deliver a mortar that is flexible and "breathes".

### 3. Mix the right mortar

Mortar should always be slightly weaker than the walling material. Traditionally it was made from lime and sand. Nowadays, it is common to use a strong cement and sand mix, which produces a very hard mortar. This may be acceptable for modern mass-produced bricks, but it is too hard for local sand or grit stone, and for most local types of brick - especially old hand made ones. Cement is impervious to water so moisture in the walls will not be able to pass out through the joints. Where joints are cement rich, damp will either stay in the building or pass through the walling material causing damage to stones in frost or lamination of brickwork known as "spalling".

A mix of lime and sand gives a softer, breathable mortar more suitable for traditional walling materials. The Conservation Officer can advise on the correct type of lime to use and its ratio to sand as this will vary according to the strength of the material being pointed. In general for bedding and pointing a mix of 1 part lime to 2.5 or 3 parts of sand/aggregate is suggested.

### 4. Use the Moorlands methods

Traditional construction styles and attractive local materials give the old buildings of the Staffordshire Moorlands their unique character. The best pointing makes a feature of these bricks or stones and does not allow the mortar jointing to stand out. It will keep the wall dry and allow it to "breathe" through the seasons.

#### (i) BRICKWORK POINTING

Compact the mortar well into the joint with a suitable pointing tool. Don't use a trowel, which smears mortar over the brick faces. Pointing irons or plasterers small tools can be used to pack the joint without smearing. It is important to "finish" the pointing so that it deflects water from the bricks rather than trapping it against them. Old brickwork with the wrong pointing finish can be severely damaged in frosty weather.

