



Manufacturer and supplier of traditional and environmentally-friendly building materials.

## Description

Fat Lime Putty or Non-Hydraulic Lime is produced by slaking fresh Quicklime (Lump Lime) in an excess of water which is then left to mature.

## Properties

Fat lime putty is also known as non-hydraulic lime as it requires exposure to air to carbonate and does not set under water. This lime is often regarded as the most appropriate lime to use for applications in the conservation of old buildings where maximum permeability is required.

## Use

Fat Lime Putty can be blended with sand to produce lime plasters and mortars or it can be diluted with water to produce limewash – see below.

As with all lime based products, they should be applied by a builder experienced in the use of lime this is especially true for fat lime products. The advice below covers a few golden rules:

### Making mortars and plasters from lime putty:

- Mixing of small quantities can be carried out by shovel on a board or with a drill mixing attachment in a bucket. Larger quantities can be done in conventional mixers or preferably in a roller/pan/forced action mixer.
- Most mixes will be of 1 part lime putty : 2 to 3 parts sand (see 'Sands' below) measured with a bucket or gauging box.
- Place the sand and putty in the mixer and allow to mix. Do not at this point add water. The mix will become smooth and very 'fatty' when ready. If making haired plasters, the hair should be teased in towards the end of the mixing process.

## Storage

Mixes, once made, will last for many months/years if stored in polythene bags or buckets with lids and will improve but stiffen up over time. Note: natural hair in plaster will deteriorate within one month - see Plasters and Renders sheet, alternatively synthetic fibre can be used.

## Sands/Aggregates

Sands for lime mortars/plasters must be washed, well graded, sharp and with the largest particles being just under 1/3 the thickness of the joint bed (sharp, well graded sands will crunch when rolled in the hand).

To effect a good colour match use sands from the locality. However, be aware of the grading and clay contamination.

Note: builders' sand is normally too soft and fine.

It is often sea sand that may well be salt contaminated and poorly graded so should always be avoided as it may introduce salt into the building.

## Pozzolans

If it is necessary to speed up the set or increase the strength of putty based mortars/plasters, pozzolans can be added. However, they should only be used with care and after taking advice, as it may be more appropriate to consider the use of a Hydraulic Lime. Portland cement should not be added to putty mixes to increase speed of set or strength. See 'Choosing a Lime' information sheet.

### Making limewash from lime putty:

## Preparation

- Take 1 volume of putty and 1 to 2 parts fresh clean water and stir thoroughly, preferably with a paint mixing paddle. The desired consistency is between milk and single cream. Limewash will settle on storage and must be stirred up before use. Pigments and other additives can be added at this stage but it should be noted that some pigments are not stable if left over a long period in wet limewash and it may be better to add them just prior to use. See Limewash application guide.
  - Tallow limewashes cannot be made from putty because the tallow has to be melted by the heat given off when quicklime is slaked. Tŷ-Mawr Lime can supply ready made tallowed limewash.
  - Please note that this guide should be read in conjunction with the other relevant sheets from Tŷ-Mawr Lime.
1. Choosing a lime
  2. Limewash - Application guide
  3. Fat Lime Mortars - Application guide
  4. Fat Lime Plasters and Renders - Application guide
  5. Safety data see over

This is intended as a guide only, there is no substitute for experience of the material and the environment in which it is being used. Both must be understood. If you are unsure or have further questions, please call Tŷ-Mawr Lime on 01874 611350.

Lime products should not be used when the temperature is likely to fall below 5° before carbonation has taken place - see application guides.

For further information about the whole subject and illustrated diagrams of plastering and pointing techniques, The Lime Handbook is available at [www.lime.org.uk](http://www.lime.org.uk).