



# Bag Rub Finish

“Bag rubbing is a simple technique where mortar is applied over masonry in such a way that its neither pointing or rendering, yet offers a sacrificial and protective coating to a wall, without having to extinguish its underlying character.”

## Preparation

Appropriate PPE measures should always be used when working with lime.

While the joints to the masonry need to be appropriately prepared it doesn't necessarily demand the same thoroughness as that for pointing. Nonetheless the works should be conducted in a diligent manner with the joints cleaned out to a depth not less than 10 mm but ideally 10-15mm for improved key.

The joints are then brush cleaned to remove excess dust and depending on conditions careful washing out with a hose may be appropriate; however, this would preferably be done at least the day before the application of mortar.

Prior to application the background - masonry & mortar joints should be adequately dampened with a fine mist spray (or similar) to control suction and prevent rapid moisture loss from the fresh mortar. This is critical to the overall performance of the works and please refer to our guidance sheet “Curing Lime Based Renders & Mortars” for further advice on this important aspect of the works.



## Application

Assuming that all repairs and other preparatory works to the masonry have been carried out and that appropriate lime and sand for the mortar have been selected, the mortar should be prepared and mixed accordingly. It should be applied as a single coat application, preferably with the mortar thrown onto the masonry and then thoroughly pressed into the joint recesses. Once ready and while the mortar is still in a plastic state it should then be rubbed up. This is best carried out using a circular scouring action similar to that of using a plastering float. Hessian sacking is generally the material of choice for this operation but other types of suitable

material may be used, the purpose is to scour it back firmly compressing the mortar into the joints between masonry units and into any fissures in the stone.

After the initial “set” has taken place and as the mortar is “picking up,” while not essential it would be beneficial for the mortar to be rubbed over again; which helps to close up any initial shrinkage. This should be done using either a damp sponge or the hessian, feeding an appropriate amount of water from a mist sprayer or similar onto the surface to aid hydration/carbonation.

Bag rubbing is NOT meant to be a render, in this application any excess of mortar over and above that needed to fill the joint is rubbed over the entire surface of the masonry as a smear coating; an additional benefit of a bag rub finish especially on softer friable stone, is that it works as a surface consolidant acting as a filler in any cracks and fissures in the stone itself as well as providing a sacrificial “shelter coat” over the surface.

## Curing and Aftercare

Most importantly and regardless of the lime binder used, the mortar should NOT be allowed to dry out too quickly during its early stages of curing! Depending on conditions at the time of application we stress that adequate measures and provisions are in place or available to implement appropriate curing and protection.

After placing, lime mortars need to be properly cared for; during the winter, they need to be protected from too much rain, especially during any spells of frost which can damage the mortar or cause it to fail completely. At all other times mortars should be prevented from rapid drying, either by wind or sun as this will desiccate (dry out) the mortar and prevent proper hydration or carbonation of the lime binder used, often resulting in a failure whereby the mortar becomes very weak and friable. Therefore, appropriate protection is a must. In all instances it may be beneficial to protect the hessian with polythene; during the winter to keep it dry so improving its thermal protection, and during the summer it will help to keep it damp for longer, increasing humidity where it's needed.

For further information on this please refer to our “Curing Lime Based Renders & Mortars” Application Guide.



## Finishing

Bag rubbing is a very simple and cost effective technique that can be subsequently painted (not essential) with either a limewash or the Beeck's Mineral Paints. The overall appearance of the stonework needn't be lost, resulting in a surface that has been unified and tidied up at a fraction of the cost of pointing or rendering, making it an extremely cost effective and somewhat traditional finish to walls that were very often meant to be covered in any case. This approach does not require a high level of skill to execute, but care and consideration will determine the outcome.

## The Mortar

The mortar should be made using sand appropriate to the masonry being worked on. A 50/50 sand such as CLS30 (50/50 coarse and fine sand - supplied by Cornish Lime) is the most popular for this type of work; while CLS35 (a fine clean washed plastering sand) has been used to good effect on numerous projects, where a coarse sand wasn't appropriate to the masonry.

It is important to select a lime that will yield a mortar strength weaker than the host masonry and our suggested mix would be at 2:5 lime to sand.

These mortars can be supplied in various forms; separate materials (lime & sand) for site mixing, premixed putty mortars or Cornerstone pre-blended dry mixed NHL mortars.

The information given in this document is for guidance purposes only and is not intended to be a specification.