

TECHNICAL IMPLEMENTATION DOCUMENT APPLICABLE TO SAINT
ASTIER LIME GROUTING AND INJECTION

The technique described in this document is based on experience. The responsibility for its implementation lies with the contractor.

Grouting and injection based on natural lime are very fluid mixes, sometimes adjuvanted with mineral filler and organic additives. They are designed to grout by gravity or to be low pressure injected in the interstitial voids of an old masonry.

The aim of this technique is to fill the voids that have been created in masonry over time as a result of exposure to the elements or structural movement.

Reinforcing old masonry using this technique is common practice, and is also used for bonding thin-joint ashlar masonry known as "marble masonry".

1. PREPARATORY WORK :

Make sure that the masonry pointing is in place so that the grout or injections will not leak out: always use the most appropriate NHL mortar to repoint the masonry. If in doubt contact us.

For grouting, holes of 20-30mm in diameter and inclined at 45° should be drilled to a depth of at least $\frac{3}{4}$ of the wall thickness, and spaced along the length of the wall at approximately 40-50cm intervals.

The operation will be repeated at heights roughly equal to the thickness of the wall.

2. MATERIAL REQUIRED :

- Propeller mixer from 1,000 to 10,000 rpm (high turbulence)
- Delivery pump for injection (pressure less than 1.5 Bar or 0.15 MPa), which can be carried out by gravity using a funnel.

3. PRODUCTS REQUIRED :

- Saint-Astier NHL5 or Saint-Astier NHL3,5
- Water
- Plasticisers compatible with NHL ex : VISCOCRETE 125P (Sika)
- Possibly Fine sand with a particle size of less than 400 µm.

4. PREPARATION OF THE VARIOUS MIXES :

- Lime (NHL5 or NHL3,5)	20 kg
- Fine sand	5 kg
- Plasticisers	0.8 kg
- Water	about 17 litres

OR

- Lime	25 kg
- Plasticisers	1 kg
- Water	about 18 litres

Mixing time: 10 minutes, gradually increasing mixer speed

5. IMPLEMENTATION :

Carry out the injection as soon as the mixture is ready, without letting it rest.

6. VARIATION :

To meet a growing need for this type of work, our company has developed a ready-to-use grout mix named COULINEX® Mortar or Binder.

This product comes in two forms, with or without mineral filler, which can be incorporated on site.

Ask for our technical data sheet or download it here: <https://www.stastier.co.uk/lime/coulinex-lime-grouting-and-injection/>

Any reproduction or representation, in whole or in part, by any process whatsoever, of the pages published in this document, made without the publisher's permission, is illegal and constitutes an infringement. Only reproductions strictly reserved for the private use of the copier and not intended for collective use, and analyses and short quotations justified by the scientific or informative nature of the work in which they are incorporated, are authorised. Violation of these mandatory provisions shall render the offender and all persons responsible liable to the criminal and civil proceedings provided for by law.