

# Lime Shelter Coats

The purpose of a shelter coat is to consolidate friable and unstable backgrounds before plastering when replacement or significant repair may be inappropriate for a number of reasons.

It is vital that a complete understanding of the decay mechanisms involved is fully understood. The analogy of the misdiagnosis of a medical condition and subsequent treatment by inappropriate methods, leading to deterioration in the patient's health should always be borne in mind when considering repair strategies.

Where a feebly hydraulic lime such as St Astier NHL 2 is being used and particularly where an aggregate is considered necessary, they can be applied by trowel, spray or brush, depending on circumstances, but are usually applied as a series of thin coats of lime rich sand mixes often requiring several applications over a period of time.

## **Backgrounds**

Backgrounds, should be clean and free of all pollutants and generally have loose or flaking materials removed before any consolidation work is attempted.

Backgrounds should be checked for the presence of damaging salts and treated where necessary. Shelter coats are often applied to porous backgrounds and considerable pre-wetting may be required. Protection and exclusion of direct rainfall to repair areas is very important.

In some circumstances, friable surfaces can be consolidated by several applications of limewater. St Astier NHL2 & NHL 3.5 are particularly appropriate for consolidating poor backgrounds. Upon completion of consolidation, the background should be treated as any other background to control suction.

## **Consolidation Materials**

NHL 2 or NHL 3.5 mixed in a ratio of 1:8-10 by volume with clean potable water and sprayed lightly on to a pre-dampened background repeatedly over a period of time can significantly improve the surface condition prior to application of a shelter coat. Always check that a limewater will be beneficial before application.

## **Shelter Coat Materials**

NHL 2 and fine aggregates usually ground marble, limestone, crushed chalk or fine silica sand.

St Astier does not provide specifications for shelter coat consolidation on an ad-hoc basis. This can only be provided by physical examination and referral to one of our preferred laboratories.