

# SITE GUIDE

## MORTAR

### SITE GUIDE No 1: TARMAC LSM FOR MASONRY, RENDERING AND PLASTERING

#### INTRODUCTION

Tarmac Mortars and Lime Sand Mortars are produced to the highest standards using clean, well-graded and high quality lime. The Lime Sand needs to be mixed with the correctly gauged amount of cement and water on site.

#### RECOMENDATIONS

- Tip Lime Sand into a clean banker with a sealed base and keep sheeted. Keep surface damp in hot weather.
- It is important to add the correct cement content to your particular mix, using a measuring device – e.g. a bucket or gauge box.
- Always use the same source of supply for cement throughout any contract.
- Stacked bricks, blocks and masonry units should be covered with polythene and kept dry. Tip the mixed mortar onto a clean board or sealed base. Bricks, blocks and masonry units should be kept as dry as possible prior to use.
- Using only clean water, each batch of mortar should be mixed to the same consistence preferably in a machine mixer. This will ensure continuity of colour.
- Mix only as much mortar as can be used within 1 ½ to 2 hours of gauging.
- Do not re-temper any mortar which has started to harden
- New work should be covered with waterproof sheeting, leaving an insulating air gap between the brickwork and the sheet.
- In difficult conditions at least cover the top course, e.g. with scaffold planks.

#### WINTER WORKING

- Tarmac LSM Lime: Sand Mortar is well suited to winter use, but should never be used in a frozen state.
- Do not use frozen materials.

- The code of practice recommends against working below +1°C (+ 3°C if temperature is falling).
- Do not use mixes weaker than strength Class III without seeking advice.
- For effective protection against frost attack, specify air entrainment when ordering Tarmac Lime Sand.
- Do not use anti-freeze in mortars.

The tables below give LSM recommendations with reasons and how to avoid problems.

#### ADVANTAGES

- Toppings and screeds can be applied at low thickness.
- Toppings and screeds installed at low water/cement ratios due to strong plasticising effect.
- Improved workability.
- Excellent resistance to water and water vapour.
- Low shrinkage plus rapid strength development.
- Improved physical strengths i.e. compressive, flexural, and tensile.
- Improved abrasion resistance.

For more details contact:  
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The information given in this technical data sheet is based on our current knowledge and is intended to provide general notes on our products and their uses. Tarmac endeavour to ensure that the information given is accurate, but accept no liability for its use or its suitability for particular application because of the product being used by the third party without our supervision. Any existing intellectual property right must be observed.

**Action Required**  
Keep mortar covered – dampen surface in hot weather  
**Reason**  
Surface may crust or fines could be washed out  
**Problems Avoided**  
Lumps in mortar through carbonation  
Colour variation

**Action Required**  
Keep bricks/blocks covered\*  
**Reason**  
Prevent saturation  
**Problems Avoided**  
Lime Bloom  
Efflorescence  
Colour variation

**Action Required**  
Gauge cement correctly (keep same type/source)  
**Reason**  
Consistent mix  
**Problems Avoided**  
Variable strengths  
Poor durability  
Colour variation

**Action Required**  
Mix thoroughly  
**Reason**  
Consistent mix  
**Problems Avoided**  
Poor durability  
Colour variation

**Action Required**  
Do not mix too wet (use clean water)  
**Reason**  
Mortar properties affected  
**Problems Avoided**  
Mortar squeezing from joints  
Lighter colour  
Bloom on mortar  
'Messy' masonry

**Action Required**  
Do not work in freezing conditions\*\*  
**Reason**  
Water expands on freezing  
**Problems Avoided**  
Damage to mortar by frost attack

**Action Required**  
Do not use frozen bricks/blocks or mortar  
**Reason**  
Lumps in mortar or units may be coated with ice  
**Problems Avoided**  
Incomplete mixing  
Poor bond

**Action Required**  
Do not use calcium chloride 'anti-freeze'  
**Reason**  
No benefit in mortar  
**Problems Avoided**  
Dampness  
Efflorescence  
Corrosion of wall ties

**Action Required**  
Tool joints consistently  
**Reason**  
Good appearance  
**Problems Avoided**  
Colour variation

**Action Required**  
Cover masonry\*\*\*  
**Reason**  
Keep out water/frost  
**Problems Avoided**  
Lime Bloom  
Efflorescence  
Damage to mortar by frost attack

\*Units may be wetted slightly in hot weather if suction high

\*\*Do not use mortar below 3°C and falling or 1°C and rising (BS8000)

\*\*\*Use waterproof sheet leaving an air gap