

Cornerstone Marine Mortar - Data Sheet

Issue 2 – Oct 2021

PRODUCT

Dry ready mixed **Lime Mortar** designed specifically for use in marine environments.

Binder Strength – NHL5 blended with Prompt Natural Cement (*can also be produced with NHL2 and NHL3.5 on request*)

Mix Ratio – 2:5

Factory blended mortar using a kiln dried coarse sand, St. Astier NHL5 and Prompt, combined with carefully selected additives to provide a quick set, reduced shrinkage and a high degree of durability, whilst maintaining the virtues of pure Natural Hydraulic Lime mortar.

USAGE

Designed predominately for use in aggressive marine environments especially where work is constrained by tidal zones. Cornerstone Marine Mortar can be used in countless applications where the virtues of lime mortar are required but with an improved setting time.

The improved set is derived from the addition of Prompt which offers the security of a false set and does not compromise or alter the mechanical properties of the NHL designation. Whilst the mortar undertakes a false set to offer security, the NHL still requires full hydration and adequate care of the mortar is still required.

Suitable for applications where the binder strength is appropriate to the host background/surface.

For specific application/project advice please consult manufacturer.

SETTING TIME

The setting time of Cornerstone Marine Mortar will be temperature dependant.

In warmer/summer conditions the setting time will be approximately 40 minutes.

In colder/winter conditions the setting time will be approximately 90 minutes.

COVERAGE

After mixing, a bag will produce approximately 13 litres of mortar.

ADVANTAGES

- Quality controlled production.
- Consistency of mix ratio and working additions.
- Fast set, making it suitable for use in tidal areas.
- High durability making it suitable for use in aggressive environments.
- Significantly reduced risk of shrinkage.

COLOURS

Cornerstone Marine Mortar is entirely natural in colour. No pigments or colourants are added.

For applications where colour is important (pointing, unpainted render finish), we strongly advise that sufficient quantities of mortar are purchased and all bags from the same batch to ensure consistency. However, please note that colour variation is still possible due to the use of natural sands

PREPARATION

In general, this will be determined by the purpose and application of the mortar.

We would expect appropriate preparation in accordance with best practice; where the surface is clean, free of dust and other debris.

Where necessary the background should be adequately dampened to promote adhesion/bond with the host surface.

Dense impervious backgrounds/materials are unlikely to be very absorbent and require little to no dampening, whereas more absorbent backgrounds/materials require adequate dampening in order to prevent rapid drying.

Manufactured by Cornerstone Mortars.

Supplied Via Cornish Lime Ltd. Cornish Lime Ltd, Brims Park, Old Callywith Road, Bodmin, Cornwall, PL31 2DZ

Tel: 0120879779 | Email: sales@cornishlime.co.uk

Whilst Cornerstone Marine Mortar includes additions to try and mitigate these issues, best practice still needs to be followed.

MIXING

A bag of Marine Mortar will require 4 to 5 litres of clean potable water. The water addition will vary according to the application and desired consistency/workability of the mortar. Always avoid making the mortar too wet, as this can promote shrinkage issues, especially when used as a render.

For drum type mixers, it is essential not to overfill the mixer.

As a dry mixed material, it is possible that some settlement or separation may occur in the bag during transit; when mixing part bags, it is especially important that the dry contents are thoroughly blended prior to mixing with water.

Best Practice/Advised Mixing - First add 60 to 70% water of the total water into the mixer, followed by the Cornerstone Marine Mortar and turn the mixer on. Allow the mortar to mix until the water is thoroughly distributed, then add additional water to achieve desired consistency.

Mix for a minimum of 5 minutes.

Other mix methods - We accept that it is generally site practice to add the water to the mortar, providing the mortar is well mixed and not too wet, this method will be sufficient.

As Marine Mortar is a fast setting mortar we recommend its use immediately after mixing.

PACKAGING

This product is supplied in polythene lined paper bags.

Pallets contain 40 x 25kg bags (1 tonne pallets).

The paper used is of prime quality and suitable for recycling, the packaging is a mixed material and should be recycled accordingly.

STORAGE

This product should be stored in dry conditions, in unopened bags and clear from the ground. Always protect bags from water and damp.

Use within 2 months of manufacturing date (provided on each bag).

TECHNICAL PERFORMANCE

COMPRESIVE STRENGTH			
24 Hr	0.5 Nmm ⁻²	Mix Ratio	2:5
7 days	2.1 Nmm ⁻²	Dry Mortar Density	1.8 KgL ⁻¹
28 days	4.5 Nmm ⁻²	Powder Density	TBC

HEALTH AND SAFETY

RISK PHRASES: R36 / R37 / R38 / R43

- Avoid contact with skin and eyes.
- Contact with wet mortar may cause irritation, dermatitis and/or burns.
- Contact between lime powder and body fluid (sweat, eye fluid etc.) may cause skin burns and respiratory irritation, dermatitis or burns.

SAFETY PHRASES: S2 / S24/25 / S26 / S37

- Avoid eye and skin contact by wearing suitable eye protection, protective clothing and gloves.
- Avoid breathing dust.
- Keep out of reach of children.
- On contact with skin and/or eyes, rinse immediately with clean water and seek medical attention.

DECLARATION:

Manufactured by Cornerstone Mortars.

Supplied Via Cornish Lime Ltd. Cornish Lime Ltd, Brims Park, Old Callywith Road, Bodmin, Cornwall, PL31 2DZ

Tel: 0120879779 | Email: sales@cornishlime.co.uk



- Cornerstone lime mortars for renders and plasters are manufactured to the requirements of BS EN 998-1: 2016.
- Cornerstone lime mortars for masonry mortars are manufactured to the requirements of BS EN 998-2: 2016. These will contain no cement whatsoever unless stated.

All Cornerstone products are CE marked and manufactured under an ISO9001:2015 accredited Factory Production Control System.

Manufactured by Cornerstone Mortars.

Supplied Via Cornish Lime Ltd. Cornish Lime Ltd, Brims Park, Old Callywith Road, Bodmin, Cornwall, PL31 2DZ
Tel: 0120879779 | Email: sales@cornishlime.co.uk