

INSTALLATION MANUAL FOR LIME PLASTER (Feb 2022)

Specifications of Lime Plaster

Pre-mixed AFRIMATHEMP lime plasters are made with Hydrated Lime – CLC (pressure hydrated dolomitic lime) (SABS 523) binder for this plaster. Water is used as a lime mix catalyst and does not contribute to strength gain. Air lime sets by absorbing CO₂ from the atmosphere. Variation in sand colour may cause a natural inconsistency in the plaster colour.

Water Addition for Plaster and Mortar

The **AFRIMATHEMP lime plasters** are suitable for interior and exterior use. Add water to achieve the preferred slump (take note that a 'too wet' mix will tend to cause sagging cracks). Mixes that are too wet will also be more prone to shrinkage cracking.

Mixing of Materials

Mix dry materials to uniform colour before adding water. When dry mix has a uniform colour, add water and mix again to get the correct slump of plaster/mortar.

Preparation

Ensure that surface is free from any loose material. Clean with a soft brush until the surface is dust-free. Apply water to soft dry porous masonry to minimize suction. Raw surface must be prepared with the lime harling method or thin "milky water" whitewash lime mix to ensure a firm surface is present before lime plaster is applied.

Application

For plasters, a 'push-on' or 'throw-on' method can be used depending on the artisan's skill. Plaster should be applied in two coats. The first scratch coat should be applied (10-15mm) and left for a week to carbonate. The second coat should be applied in a layer thinner than the first between (5-7mm) thick. Floating must be done after bleeding water has disappeared and the surface becomes firm (floating bleeding water back into the surface will cause a thin whitish layer, delaminated upon drying). Wall finish can be floated or sponged.

Curing and After Care

Lime sets by absorbing CO₂ from the atmosphere. A higher humid condition is favourable for lime to set and accelerate the setting of lime. Expose, finished plaster and mortar to as much as possible atmospheric air (leave windows and doors open when inside plaster has been done). Curing in hot weather must be done by wetting the wall with mist sprayers or hanging hessian 15mm away from the wall, like a curtain, and keeping it wet. Curing of lime plaster & mortars must be done for two weeks after building/ repair work. Protection is vital specifically in the first two weeks after application. Protect from excessive water and cold weather in this period.