

Lime Plaster walls in shower areas: Sealers applied and maintenance guide

1. Background information

For sustainable living with natural finishes, lime plaster is a great choice as it is a traditional building material. Historically used from strengthening to finishing walls and ceilings, it mainly comprise lime, sand, water and pigments. It cures slowly and may take months to fully cure and harden completely.

2. Types of sealers in place

a. Natural Soap

Soaping is a must to do when working with natural lime. The fatty acids in the soap will react with the free lime to produce calcium stearate (aka soap scum) within the capillaries of the lime plaster. It repels water and provides some degree of stain resistance. This can only be applied once in the life of lime plaster.

b. Water repelling agent

There are many kinds of water repelling agents, mainly they are either silane, or siloxane or a hybrid. They attach themselves to free calcium present within the capillaries. They are also known as impregnators. In fact, any kind of stone impregnating water repellent (or sealers) can be used on our lime plaster walls. Do check the product information that it doesn't alter the look as some product contains additives. If it is just pure silane or siloxane, it won't alter the look.

c. Natural beeswax

Beeswax is a traditional and natural film-based protection. When the beeswax solution is applied, the solvent will slowly evaporate, leaving behind the beeswax. It provides soft protection against scuffs and stains

3. Required Maintenance

The one that "wears off" the fastest is the water repelling agent. As the lime cures and develop some intrinsic cracks, you will notice "cracks" that appears when the wall is wet. This is because the previously applied water repellent "moved" with the cracks. Lime cures the fastest when is just applied and slows down with time, until it reached complete carbonation. The water repelling on the surface can also wear off from repeated cleaning. That being said, you need to maintain the performance of water repelling agent.

a. **How to apply**

Application is very straightforward. Wet a cloth or sponge with the water repelling agent, and wipe on the walls **when it is dry**. Use some mild pressure to "push" it into the walls. Wait for 10 mins or so and then wipe off the excess from the walls. Repeat as desired.