



External renders on concrete blocks, lime finishing and manual application

The 1st coat shall be realized with cement or a blend of lime and cement. The 2nd coat can be realized with a hydraulic lime, then the final coat with a natural hydraulic lime if chosen. All natural hydraulic limes can be chosen for the finishing coat but the white one's highlights the color of the local sands and pigments.

Mix design

A mortar is necessarily prepared with one or several binders, clean sand, clean water and possibly admixtures.

- Introduce a small amount of water in the mixer to clean the preceding mix
- Introduce the sand and the binder(s) in the mixer then the rest of the water
- Fix the machine in the mixing position, for 3 to 5 minutes to obtain a perfect homogeneity without any lump or pellet

Preparation of the substrate

- The wall must be clean, sound without any dust before the application of the render
- Wet the wall the day before the application to refusal

Application

It is recommended to apply traditionally in 3 coats.

- **1st coat:** Thickness of 1 to 5 mm. Its function is to help the 2d coat hanging to the substrate. The mortar shall contain a most important amount of binder. After application of the render, screed it and leave the surface rough to prepare the application of the second coat
- **2nd coat:** Thickness of 15 to 20 mm (including the first coat). The second coat guarantees the waterproofing of the wall and its flatness. Wait minimum 2 days between the application of the first coat and the second (7 days by wet and cold weather). Wet the first coat before the application of the second coat (the day before). The amount of binder in the mix should be less important as for the first coat. After application of the render, screed it and leave the surface rough to prepare the application of the second coat
- **Finishing plaster:** Thickness of 5 to 8 mm. This coat decorates and protects the wall at the same time. Wait 4 to 7 days between the application of the second coat and this last decorative one (2 weeks if the mortar is a pure lime mortar). Wet the second coat before the application of the finishing coat (the day before). The amount of binder in the mix should be less important as for the two previous coats. After application of the render, screed it and make the finishing aspect on fresh mortar or during the setting.

Choice of finish

- **Crushed render:** Made in a fresh mortar with a float
- **Smooth:** Obtained on a fresh mortar with a trowel.
- **Rough render:** Made on a hard mortar (setting finished) with a scrapper.
- **Sponged render:** Made on a fresh mortar with a sponge float. Sand grains are cleaned. When setting starts, it's possible to work with a sponge to give an aged appearance to the render.
- **Raked plaster:** The finish is made on a dry mortar (after the setting) with a nail float

Special care

Always protect the render from the wind, the rain and the sun during the application and also the setting (with a tarpaulin scaffold for example). Always close the shutters during the first days of the setting to guarantee a homogeneous colour.



Indicated quantities

	1 st coat	2 nd coat	Finishing plaster
Binder	Ciment gris CEM II (as i.pro TECHNOCEM)	i.pro CALIX	i.design RENOBLANCHE
Amount of binder	1 bag of 35 kg	1 bag of 35 kg	1 bag of 35 kg
Dry sand	7 to 9 buckets	11 to 15 buckets	13 to 26 buckets
Water	Around 20 litres	Around 20 litres	Around 20 litres

Or

	1 st coat	2 nd coat	Finishing plaster
Binder	Ciment gris CEM II (as i.pro TECHNOCEM)	i.pro BATILIAN	i.design RENOCHAUX
Amount of binder	1 bag of 35 kg	1 bag of 30 kg	1 bag of 25 kg
Dry sand	7 to 9 buckets	10 to 12 buckets	9 to 18 buckets
Water	Around 20 litres	Around 20 litres	Around 20 litres

Indicated consumption (kg/m²/cm of thickness)

	1 st coat	2 nd coat	Finishing plaster
Dry sand	9.2 to 11.2 kg	18 to 24 kg	20 to 28 kg
Binder	i.pro TECHNOCEM	i.pro CALIX or i.pro BATILIAN	Natural hydraulic lime or i.design RENOCHAUX
Amount of binder	4 kg	6 kg	5 kg
Amount of water	2.3 litres	3 litres	3 litres

Why use a lime mortar?

- Well proven since many centuries, lime is now well known as the most suitable binder for the realization of renders
- Lime protects all types of substrates. It can be removed without damage. That's why lime is recommended in restoration
- Lime is a natural and eco-friendly product
- It allows movements of the buildings and avoids cracks inside the walls
- During and after the setting, lime mortars are permeable to air and waterproof. They allow the evaporation of the water and the walls "breathe"
- Lime mortars are easy to colour to obtain almost all the desired colours
- Finally lime mortars are easy to apply and sticky for a good adhesion.

