

## PRODUCT DESCRIPTION

PlekoLime CR is a pre-blended, natural hydraulic lime (NHL) restoration render with rustic earthen coarse finish. It is specially formulated for heritage restoration projects. It offers excellent compatibility with traditional building materials, providing a breathable and durable finish. Its natural beige color enhances the aesthetic quality of restored facades, maintaining the historical integrity of heritage sites, particularly suited to Middle Eastern architecture. It is easy to use by just adding water, improving on-site quality control.

## USES

PlekoLime CR is suitable for restoration and rendering of heritage facades. It can be applied over PlekoLime SC or directly onto substrates to provide a durable and breathable finish. Ideal for use on historic buildings requiring traditional lime-based systems, for interior and exterior use.

## APPROVED SUBSTRATES

PlekoLime CR can be used directly onto stone, brickwork, rough concrete, natural lime-based, or cementitious substrates, making it ideal for both restoration projects and new heritage construction

## PACKAGING

25 or 50 kg in multiply paper bag

## COVERAGE

1.8-1.9 kg/m<sup>2</sup>/mm depending on the substrate and application method. Recommended thickness between 4-10 mm. A 25K bag will yield approx. 16.7 liters of mortar. Manufacturer does not warrant square meter coverage, which can vary greatly according to application techniques.

## PROPERTIES

- **High Breathability:** Allows moisture vapor transmission, essential for historic structures
- **Cement-Free:** Preserving the authentic character of heritage structures
- **Natural Finish:** Beige color, aesthetically in harmony with heritage buildings
- **Strong Bonding:** Adheres well to various substrates, enhancing durability
- **Low Shrinkage:** Reduces the risk of cracking during curing
- **Environmentally Friendly:** Low embodied energy and natural components contribute to sustainability
- **Compliance:** Conforms to EN 459-1 (Natural Hydraulic Limes)
- **Factory Controlled Quality:** only requires addition of water, improving on-site quality control

## TECHNICAL DATA

Appearance	Free-flowing beige powder
Binder	NHL 3.5
Specific Gravity (kg/L ± 0.5)	1.83
Water Ratio (%)	23-25
Compressive Strength (N/mm <sup>2</sup> ) after 28 days / EN 1015-11	≥ 1.8
Tensile Bond Strength (N/mm <sup>2</sup> ) after 28 days / EN 1015-12	≥ 0.35
Initial Setting Time (hrs)	2-4
Final Setting Time (hrs)	8-10
Vapor Permeability (W-value)	< 0.2 kg/m <sup>2</sup> h <sup>0.5</sup>

## INSTALLATION

### SUBSTRATE PREPARATION

Surface must be sound, clean, dry, free of bond-inhibiting materials such as paint, grease, oil, efflorescence, form release agents and curing compounds. It should have been sufficiently cured in a way that any shrinkage has already occurred. Moisten slightly the substrate with clean water prior to application. Surface should appear damp with no water running.

It is recommended to prepare surface with PlekoLime SC.

### MIXING

Use a clean container free of all foreign substances for preparing and mixing material. Use a heavy duty electric drill and mixing paddle. Add 5.75-6.25 L (for 25Kg bag) of potable water to container, add PlekoLime CR in small increments while mixing thoroughly to achieve lump-free consistency. Let mixture set for 5 minutes and re-temper. Small amount of clean water may be added if necessary to improve workability, but do not add water once the mixed mortar starts to harden. At high temperatures, use chilled (15-30°C) water for mixing and keep mixed grout temperature below 30 °C.

### APPLICATION

Apply PlekoLime CR using a trowel or spraying equipment. at a thickness of 4-10 mm per layer. Smooth the surface with a trowel or float once the material begins to firm up. If a subsequent coat is required, lightly scratch the surface to create a mechanical key for the next layer, wait at least 6 to 8 hrs between coats.

### CURING

To ensure proper curing and minimize the risk of shrinkage cracks or surface dusting, the render must be protected from rapid drying caused by high temperatures or strong winds. In hot or dry climates, it is advisable to maintain a humid environment around the surface for the first 3–5 days.

This can be achieved by covering the render with damp hessian or breathable fabric, ensuring it does not come into direct contact with the surface to prevent staining. The covering should be kept moist by spraying clean water 2 to 4 times per day, supporting hydration and reducing evaporation.

### LIMITATIONS

Substrate temperature: 4 - 35°C

Ambient temperature: 4 - 35°C.

Maintain minimum 4 °C (40°F) ambient temperature for 24 hours after application.

Protect from direct sunlight, wind and rain during application. Protect from rain or frost for 48 hours after application.

Do not mix with any additive or product unless recommended by Pleko.

Pleko bears no responsibility for the defects due to the improper or non-recommended use of the product.

### CLEANING

While still fresh, soluble in water. Clean all equipment with water immediately after use. After hardening, tools should be cleaned mechanically.

### STORAGE

Store in cool, dry, well-ventilated area, protected from freeze, heat and direct sunlight and at a temperature between 4°C (40°F) and 38°C (100°F), in tightly sealed original container off the ground. Storage time must not exceed one year.

## HEALTH AND SAFETY

Avoid contact with eyes and skin. Prevent inhalation of dust.

The product contains hydraulic lime, which can be irritating to the skin and eyes. It is preferable that the application be done in a ventilated area, and to wear protective gear for hands, eyes and respiratory system and to avoid breathing of the dust. Splashes on the skin should be washed away by cleaning with soap and water. In case



of contact with eyes, wash thoroughly with clean water. If swallowed, do not induce vomiting, in both cases seek medical attention. The product is non-flammable

**Attention**

This product is intended for use by qualified professional contractors, as a component of a larger construction system and specification. It should be installed in accordance with given instructions and specifications. Information listed above reflects the criteria for our internal quality test and practical experience. Results depend on listed instructions and consumer skills and are therefore out of our responsibility whether expressed or implied. All values are valid for the product when dispatched from the plant. Technical data are generated under laboratory conditions, some variations are expected due to weather, site, and application conditions which are beyond the control of the manufacturer. We reserve the right to change any given specification without notice.