

RC KALEI

LIME RENDER BASED ON NATURAL HYDRAULIC LIME OF ST.-ASTIER

Report R.I.C.H. DI: 2013.11924 (water vapor permeability)

Report SETEC (France) no.12.2912121.007.01.A (confirmation cement-free product)

Natural lime mortars & lime paint



ADVANTAGES OF RC KALEI

- ✓ Free of cement, ashes and other pozzolanic additions
- ✓ Very good plasticity
- ✓ Excellent vapor permeable properties
- ✓ No shrinkage cracks
- ✓ Moisture-regulating effect
- ✓ Approximates best the original and traditional lime renders

Description

RC KALEI is a lime render based on the natural hydraulic lime of St.-Astier and mineral fillers. RC KALEI contains no cement and thus best approximates the age-old technique for the authentic finishing of exterior walls. RC KALEI is available in two versions: a coarse and fine grain (RC KALEI F).

In damp weather, RC KALEI shows the famous "staining" and leaves the structure of the masonry visible.

Properties

RC KALEI is a thin plaster layer (2 - 4 mm) which gives a protective traditional structure to brick and natural stone and has the following properties:

- Promotes the drying of the substrate;
- Does not contain cement;
- Very good plasticity;
- Very vapor permeable, good adhesion, no shrinkage cracks;
- Moisture-regulating effect, existing salts do not react with RC KALEI but can migrate through it;
- Highly renovative and decorative character;
- Can be painted over with facade paints (after a minimum of 1 month);
- A hydrophobic treatment can be applied as extra protection.

Disadvantages of cement-based lime renders versus RC KALEI

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|---------------------------------|----------------------------|
| ✗ Vapor permeability inhibiting | ✗ Higher risk of shrinkage |
| ✗ No elastic properties | ✗ Not self-healing |
| ✗ Not moss-killing | ✗ Sensible to salt |

Substrate

The substrate must be sound and free of questionable materials. Consultation with our technical advisers is recommended for surfaces treated with impregnating agents (silicones, silanes, etc.). It may then be necessary to apply a test area. For applications on concrete it is best to apply RC FOND as an adhesive layer. Loose joints must first be repaired.

All moisture problems (rising and seeping damp) must be resolved first to prevent damage. The substrate should not be characterized by extreme amounts of salts. Mosses present should be treated with RC KILGREEN.

When applying RC KALEI, the substrate must be moist: always moisten the substrate sufficiently, preferably the evening before and slightly spray the wall in the morning. Old paint layers should be removed as much as possible and the surface may need a new primer layer.

Application instructions

➤ Creation of RC KALEI

The RC KALEI powder is packed in a bag of 25 kg. RC KALEI PIGMENT is already pre-dosed (1 jar of pigment per bag of 25 kg RC KALEI). First put a minimal amount of mixing water in a mixing tub, then add the pigment and stir vigorously. Afterwards add the RC KALEI powder and mix for 4 to 5 minutes with an electric slow rotating mixer until a homogeneous lump-free substance is obtained.

- Mixing ratio with the block brush: 6,5 to 7 liters / 25 kg
- Mixing ratio with the worm pump: 7,5 to 8 liters / 25 kg

If necessary, add water to the desired consistency, this amount is partly determined by the pigmentation, the surface and the brushing technique. Do not add any additives, as they greatly impede the vapor permeability and aesthetic appearance of the mortar.

➤ Application of RC KALEI

RC KALEI is applied on a damp surface. We always recommend 2 layers. In layers applied too thickly cracks may appear; however, these can be sealed with the second layer. This is possible as long as a waiting time of at least 24 hours is respected between placing the two layers. RC BADGEON can be applied both manually and mechanically.

1. Apply with block brush (manually)

Strip by strip the RC KALEI is painted on the wall. Always work from top to bottom. When applying the last coat, care should be taken to obtain the typical stripe effect.

To apply the RC KALEI manually, mix 6,5 to 7 liters of water per 25 kg bag of RC KALEI. About 20 m² RC KALEI can be placed per day.



2. Application with worm pump (mechanically)

If it is necessary to apply large areas of RC KALEI, a worm pump is used. After applying the RC KALEI to the wall, it can be applied again with a damp block brush to obtain the typical stripe effect.

1 bag of RC KALEI (25 kg) must be mixed with 7,5 to 8 liters of water before the mixture is placed in the worm pump. By using a worm pump, you can apply up to 150 m² of RC KALEI per day. When applying by machine, use a pressure of 8 to 15 bar and a nozzle of 8,5 or 10,5.



➤ Finishing options (after 7 days, depending on weather conditions)

- Without further finishing
- Treat with hydrofuge: RC 805 ECO (extra protection against pollution)
- Treat with impregnating agent: RC 809 AG (anti-graffiti properties)
- Treat with hydrophobic cream: RC HYDROCRÈME 4 (water-resistant properties)
- Finish with lime paint: RC CALCO
- Finish with siloxane paint: RC SILOXCOAT (high dirt-resistant properties)
- Finish with silicate paint: RC SILICA PAINT (slightly strengthening properties)

RC KALEI may NEVER be finished with vapor-resistant or vapor-tight paint (so no epoxy, polyurethane, acrylic paints, cement systems ...).

Consumption

Is highly dependent on the substrate and application: ± 2 to 6 kg/m² (layer thickness 2 to 4 mm). The exact consumption must be determined experimentally.

Technical information

Delivery form:	Beige powder
Density	1,3 kg/dm ³
Binder:	Natural hydraulic lime NHL 3.5 of St.-Astier
Additives:	Mineral fillers
pH (solution in water):	12
Grain structure:	0,05 to 0,63 mm
Colors:	See color range (can be colored in the factory on request)
Workability:	3 hours (depending on the temperature)
Curing time:	2 to 3 months due to carbonatation (depending on the weather conditions)

Security

Consult the most recent Safety Data Sheet.

Remarks

- RC KALEI can be processed for up to 3 hours at temperatures between 5°C and 30°C.
 - The drying time varies between at least 2 to 5 days.
 - After application, protect RC KALEI against rain for 48 hours and frost for up to 72 hours.
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Cleaning of equipment

With water immediately after use.

Storage / Shelf life

- Keep only in the original container in a cool, well-ventilated place. Opened containers should be carefully closed and stored upright to prevent leakage.
 - 1 year after manufacturing in original, closed packaging.
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Packaging

25 kg bag (item no. 609010), 42 bags on a pallet.

Photos



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Legal Notes

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