

ECOCORK LIME

NATURAL HYDRAULIC LIME RENDER WITH CORK INCORPORATION

1. DESCRIPTION

ECOCORK LIME is a lightweight render mortar formulated with Natural Hydraulic Lime (NHL), cork aggregates, calcareous aggregates and additions.

With the incorporation of cork and the exclusive use of a Natural Hydraulic lime binder in the formulation, *ECOCORK LIME* fits into a new level of sustainable construction products with an ecological feature. Simultaneously, this mortar contributes to the improvement of the thermal and acoustic insulation of the constructive elements where it is applied.

ECOCORK LIME may be applied either by mechanical or manual projection indoors and outdoors.

2. FIELD OF USE

ECOCORK LIME is suited for executing lightweight renders on internal and external surfaces of walls and ceilings, where it is intended to improve thermal and acoustic performance of walls. This render integrates a thermal and acoustic coating solution in double layer, corresponding to the filling render.

ECOCORK LIME should be applied over rough cast mortar, such as *REABILITA CAL CS*, on substrates constituted by ceramic brick, cement block, concrete and stone masonry walls. However, in some of these substrates special adhesion precautions must be taken.

It may be used as rehabilitation material in old constructions, and in this case, we suggest prior consultation of our Technical Services.

3. PRODUCT CHARACTERISTICS

Powdered product	Value	Standard
Colour	Grey	-
Granulometry	< 2,0 mm	EN 1015-1
Paste product	Value	Standard
Mixing water	49,0 % ± 1,0 %	-
Density	900 ± 50 kg/m ³	EN 1015-6
Theoretical consumption	7,0 kg/m ² /cm	-
Hardened Product	Value	Standard
Compressive strength	Class CS I	EN 1015-11

ECOCORK LIME

NATURAL HYDRAULIC LIME RENDER WITH CORK INCORPORATION

Flexural strength (28 days)	0,5 N/mm ²	EN 1015-11
Adhesion to brick and block / Mode of fracture	≥ 0,1 MPa/B	EN 1015-12
Density	600 ± 150 kg/m ³	EN 1015-10
Capillarity	Class W1	EN 1015-18
Permeability to vapour	≤ 15 μ	EN 1015-19
Reaction to fire	Class B-s1-d0	EN 12667
Thermal Conductivity	Class T1	EN 12667

4. APPLICATION

a) Substrate preparation

Substrates should be free from dust, release agents, loose or instable materials, efflorescence, as well as from any type of material which affects normal adhesion conditions.

In hot or dry weather, the substrate should be saturated with water, and application should be started when it is dry.

On edges, particularly in building corners and door openings, it is advisable to apply suitable profiles (PVC with fiberglass mesh with anti-alkali treatment).

Before applying *ECOCORK LIME*, application of *REABILITA CAL CS* should take place on stone masonry surfaces, reducing irregularities and levelling the average thickness of *ECOCORK LIME*.

In applications on old substrates or in building rehabilitation operations we suggest prior consultation of our Technical Services. In this case, substrates should be checked in terms of stability, and it is essential to evaluate the need to carry out substrate reinforcement, even if occasionally.

b) Preparation of mixture

ECOCORK LIME should be mixed in projection equipment with pre-mixture of the product.

In machines without automatic water dosing, mix *ECOCORK LIME* in the proportion of 6,5 to 7,0 litres of water per bag of 14 kg.

In machines with automatic water dosing, adjust to the minimum water flow allowing good workability.

c) Application

So as to minimize working joints, complete panels should be executed, whenever possible. Working joints should be resumed within a maximum period of 12 hours.

After application of the mortar, plaster should be conveniently tightened with an appropriate ruler.

ECOCORK LIME

NATURAL HYDRAULIC LIME RENDER WITH CORK INCORPORATION

In the application of *ECOCORK LIME* renders should be reinforced in traction areas, especially in the transition between different substrate materials, blinds' spaces, corners, door openings and slender panels with PVC profiles with anti-alkali treatment glass fibre mesh, with the appropriate section and mesh.

Reinforcement meshes must be properly embedded in *REABILITA CAL AC* finishing layer, whereby their application must be carried out as follows:

- Apply *ECOCORK LIME* with the desired thickness;
- Apply the first layer of *REABILITA CAL AC* with a 6 mm toothed trowel, in which *ISOVIT REDE 160* is embedded, without crushing;
- Apply the second layer of *REABILITA CAL AC* until the mesh is not perceptible, and the sanded finish is obtained in this layer;
- In *ECOCORK LIME* thicknesses greater than 6 cm, it is recommended to apply *REABILITA REDE AR 160* in the intermediate layer.

Attention should be made for the existence of render expansion joints or large panels. On facades facing the south-west quadrant there should be a special care, with spacing adequate to the normal operation of the plaster.

Direct contact with the soil must be avoided, however, waterproofing solutions may be provided in the areas where coating begins so as to prevent its fast aging.

d) Thicknesses

In outdoor applications, a minimum thickness of 2 cm should be guaranteed so as to ensure normal operation of plaster. In particular situations, especially in areas of significant humidity and wind exposure, a minimum 2,5 cm thickness is advisable.

In order to avoid cracking due to mortar sagging, layers with thicknesses greater than 2 cm should not be applied. Whenever new layers are required, the following procedures should be followed:

- The different layers should be identical in thickness;
- The 2nd layer should be applied after the first one is set, which should have a fresh aspect;
- In thicknesses greater than 6 cm, layers should be reinforced with anti-alkali treated glass fibre reinforced mesh (as per paragraph 4.c).

e) Restrictions

ECOCORK LIME should not be applied at room and substrate temperatures below 5 °C and above 30 °C. Its curing time is 28 days.

In hot and/or dry weather or when substrates are directly exposed to sun rays, the substrate should be previously wetted and application should only be started when it is dry.

Application in the presence of strong winds may cause render cracking. In such case, walls should be protected so as to minimize the effects of wind action.

ECOCORK LIME is not a final finish, and it is fundamental to apply a thin finish, *REABILITA CAL AC*, to obtain the desired finishing texture.

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f) Complementary Advices

The kneading water must be free of any impurities (clays, organic matter, etc.) and drinking water should be preferably used.

No mortar that has started its setting process should be applied. Do not soften mortars by adding water after preparation.

Do not add any other products to the mortar. *ECOCORK LIME*, should be applied as it is shown in its original packaging.

5. PACKAGING AND VALIDITY

Packaging

14 kg paper bags in plasticized pallets of 54 bags.

Validity

12 months provided the conditions of the original packaging remain unaltered and in good storage conditions, protected from extreme temperature and humidity.

6. HEALTH AND SAFETY

(DOES NOT REPLACE CONSULTATION OF THE PRODUCT SAFETY DATA SHEET)

- Irritating to eyes, respiratory system and skin;
- May cause sensitization in contact with skin;
- Do not breath dust;
- Avoid contact with skin and eyes;
- If it comes in contact with eyes, rinse immediately and thoroughly with water and seek a specialist advice;
- Use protective clothing and appropriate gloves;
- Keep out of children's reach.



ECOCORK LIME

EN 998-1

Lightweight (LW) and thermal (T) insulation mortar for external and internal coatings

Declaration of performance DOP.12004

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Being the conditions of applying our products out of our reach we do not take responsibility for its misuse. It is the customer's duty to verify the suitability of the product for the intended purpose. In any case, our responsibility is limited to the value of the goods supplied by us. The information contained in the present data sheet may be altered without prior notice. In case of doubt and if you need any further advice please contact our Technical Services.

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