



Secil **ecoCORK** Lime

NATURAL HYDRAULIC LIME AND CORK THERMAL RENDER

TC.E.086.4 EN

1. DESCRIPTION

Secil ecoCORK Lime is a light weight mortar formulated from natural hydraulic lime, cork aggregates, calcareous aggregates and additives.

With the incorporation of cork and exclusive use of a Natural Hydraulic Lime binder in the formulation, *Secil ecoCORK Lime* is part of a new range of sustainable construction products with ecological features. It also contributes to the improvement of thermal and acoustic insulation of the building elements where it is applied.

Secil ecoCORK Lime can be applied by mechanical spraying or manually both indoors and outdoors.

2. AREA OF USE

Secil ecoCORK Lime is suited in the execution of light weight renders in internal and external surfaces of walls and ceilings, where it is intended to increase the thermal and acoustic performance of the walls. This render is part of a solution of acoustic and thermal application in double layer, corresponding to levelling render.

Secil ecoCORK Lime should be applied on roughcast mortar *REABILITA Cal Consolidação*, onto ceramic brick, cement block, concrete and stone masonry walls substrates. However, in some of these substrates, some special precautions should be taken regarding the adhesion.

It can be used as rehabilitation material in old construction, for which we advise to previously contact our Technical Services.

3. PRODUCT CHARACTERISTICS

POWDERED PRODUCT	VALUE	STANDARD
Aspect	Gray powder	-
Grading	<2.0 mm	EN 1015-1

PRODUCT IN FILE	VALUE	STANDARD
Mixing water	49.0 ± 1.0 %	-
Density volume	900 ± 50 kg/m ³	EN 1015-6
Estimated usage	7.0 kg/m ² /cm	-

HARDENED PRODUCT	VALUE	STANDARD
Resistance to compression	Class CS I	EN 1015-11
Flexural strength (28 days)	0.5 N/mm ²	EN 1015-11
Adhesion to brick and block / Modulus of fracture	0.1 MPa / B	EN 1015-12
Density volume	650 ± 50 kg/m ³	EN 1015-10
Capillarity	Class W1	EN 1015-18
Water vapour permeability	< 15 μ	EN 1015-19
Reaction to fire	Class B s1 d0	EN 12667
Thermal conductivity (W/m.°C)	0.10	EN 12667

4. APPLICATION

Preparation of substrates

Substrates must be free of dust, release agents, disaggregate or unstable matters, efflorescence, as well as any other material that affects the normal adhesion conditions.

In hot or dry weather the substrate must be saturated with water beginning its application when it is dry.



Application of *Secil ecoCORK Lime*



Levelling of surface with ruler



Trowelling of final surface

On edges, particularly in corners of buildings and spans of door frames, we advise the application of proper profiles (metallic).

Before applying *Secil ecoCORK Lime*, a roughcast mortar or speck should be applied with *REABILITA Cal Consolidação*.

In applications on old substrates or in building rehabilitation, we recommend to previously consult our Technical Services. In this case, the stability of the substrates should be checked. The need to reinforce the substrates using *REABILITA Cal Inject* (including sporadically) should be assessed.

Preparation of mixture

Secil ecoCORK Lime should be mixed in spraying equipment with pre-mixing of the product.

In equipment without automatic water dosing, mix *Secil ecoCORK Lime* in the proportion of 6.5 to 7.5 litres of water for each bag of 14 kg.

In equipment with automatic water dosing, adjust to the minimum water flow to get a good workability.

Application

In order to minimize the construction joints, ensure whenever possible the execution of complete sections. The recovery in construction joints should be made within a maximum of 12 hours.

When applying *Secil ecoCORK Lime* reinforce the renders in traction areas, especially in transition of different substrate materials, blind boxes, corners, vertices of spans and slender sections, with glass fibre nets, with anti-alkaline treatment, with the appropriate section and mesh.

The reinforcement meshes must be conveniently embedded in the thickness of the render. Therefore, its application should be carried out as follows:

- ▶ Apply at least 60 to 70% of the layer of *Secil ecoCORK Lime* on the substrate;
- ▶ Embed conveniently the reinforcement net in the layer applied;
- ▶ Apply the necessary mortar until obtaining the right thickness, ensuring that the inferior layer remains workable.

Provide expansion joints of the render or fins, in sections of larger size. Take extra precautions on façades oriented towards the south-western quadrant, with adequate spacing for the normal functioning of the render.

After application of the mortar, the render must be conveniently tightened with a suitable ruler.

After the application of the mortar, the final surface of *Secil ecoCORK Lime* should be trowelled to receive the final finish, with *REABILITA Cal Acabamento*, or others.

In case of direct contact with the soil, consider using waterproofing solutions in the areas where the covering is to be taken off, to avoid its accelerated ageing.

Thicknesses

In external applications, ensure a minimum thickness of 1 cm to guarantee the normal functioning of the render. In specific cases, especially in areas of significant damp and exposure to wind, we recommend the execution of a minimum thickness of 1.5 cm.

Never apply layers with less than 1 cm thick.

To avoid cracking from sagging mortars, do not apply layers above 2 cm thick. Whenever is necessary to make new layers, proceed as follows:

- ▶ The different layers must have equal thicknesses;

- ▶ The second layer should be applied after the setting of the first one is complete looking recent;
- ▶ In thicknesses above 4 cm, the layers must be reinforced with glass fibre nets, with anti-alkaline treatment.

Restrictions

Secil ecoCORK Lime should not be applied in room and substrate temperature below 5°C and above 30°C. It has a curing time of 28 days.

In hot and/or dry weather, or in case of substrates exposed to the direct action of solar rays, previously wet the substrate beginning the application when it looks dry.

In these conditions, proceed with daily watering of the executed surfaces, for one week, to keep the renders permanently wet.

In the presence of strong wind, the application may cause cracking in the render. In this case, protect the walls to minimize the effects of the wind.

Secil ecoCORK Lime is not a final finish. It is essential that a thin finish, *REABILITA Cal Acabamento*, be applied to obtain the desired texture.

Additional advice

- ▶ The mixing water should be free of any impurities (clay, organic matter), and preferably drinkable;
- ▶ Do not apply any mortar that has started its setting process. Do not weaken the mortars by adding water, after preparation;
- ▶ Do not add any other products to *Secil ecoCORK Lime*. It should be applied as it is presented in its original packaging.

5. PACKAGING AND VALIDITY

Packaging

14 kg paper bags in 54-bag laminated pallets.

Validity

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



7. HEALTH AND SAFETY

(DOES NOT SUBSTITUTE PRODUCT SAFETY DATA SHEET)

- ▶ Irritating to eyes, respiratory system and skin;
- ▶ May cause sensitisation by skin contact;
- ▶ Do not inhale dust;
- ▶ Avoid contact with skin and eyes;
- ▶ In the event of contact with eyes, wash immediately with plenty of water and seek medical advice;
- ▶ Wear protective clothing and appropriate gloves;
- ▶ Keep out of reach of children.

As the application of our products is beyond our control, we are not responsible for their misuse. It is the customer's duty to check the suitability of the product for its intended purpose. In any event, our responsibility is limited to the value of the goods supplied by us. The information on this sheet may change without notice. If you have any queries and require further clarification, please contact our technical services.

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6. ASSOCIATED PRODUCTS

- ▶ **REABILITA Cal Consolidação**
(Natural hydraulic lime-based mortar for execution of adhesion layer)
- ▶ **REABILITA Cal Acabamento**
(Natural hydraulic lime-based mortar for execution of fine or smooth sandblasted finishes)
- ▶ **REABILITA Cal Inject**
(Natural hydraulic lime-based mortar for execution of fine or smooth sandblasted finishes)
- ▶ **Acabamentos Secil Argamassas**
(Fine layer finishing of Secil Argamassas)



Secil ecoCORK Lime

EN 998-1:2010

Light weight mortar (LW) and of Thermal Insulation (T) for internal and external coverings.

Declaration of performance TC.E.0988