



# Keralevel® Eco LR

Extra-rapid hardening, eco-friendly, mineral levelling product for the high-performance, high-thickness correction of irregular substrates, ideal for use in GreenBuilding. Low CO<sub>2</sub> emissions, contains recycled raw materials.

Keralevel® Eco LR develops a perfect thixotropic balance which is ideal to correct walls that are out of plumb or irregular, and uneven floors without holding up site schedules and subsequent laying of floor/wall coverings.



## Product Strengths

- Internal, external
- Recyclable as an inert material at the end of its life
- Thicknesses from 1 to 25 mm
- Prolonged workability, also suitable for large surface areas
- High dimensional stability and long-lasting performance
- High mechanical resistance
- Suitable for laying ceramic tiles, porcelain tiles, natural stone, hardwood floors and resilient materials using adhesives



## Performance GreenBuilding

	 Mineral ≥ 60%	 Recycled Mineral ≥ 30%	 CO <sub>2</sub> ≤ 250 g/kg	 Low Emission	 Recyclable
	 Natural mineral content 61%	 Recycled mineral content 31%	 CO <sub>2</sub> /kg emission 199 g		 Can be recycled as inert material

### Keralevel® Eco LR

- Category: Inorganic Mineral Products
- Class: Mineral Levelling Products
- Rating: Eco 4

## Areas of use

### Use

Levelling of uneven substrates, with extra-rapid setting and drying and compensated shrinkage. Thicknesses from 1 to 25 mm. For use in domestic, commercial and industrial applications and on heat-radiant slabs. Compatible with all cement-based, reactive-epoxy and polyurethane two-component adhesives, dispersed in water and in solvent solutions.

### Before laying:

- porcelain and ceramic tiles, klinker, cotto and natural stone of all types and formats,
- agglomerate materials,
- hardwood floors
- textiles, rubber, PVC, linoleum, paints.

Suitable for use on cement-based plasters or lime and cement mortars, on mineral screeds or screeds made using Rekord Eco or Keracem® Eco as binder or ready-for-use premixed products, cement-based screeds, concrete and residual traces of cement-based adhesives.

### Do not use

Do not use on highly flexible substrates subject to thermal expansion, or on wet surfaces or substrates subject to continuous moisture rising.

## Instructions for use

### Preparation of substrates

Substrates must be free from dust, oil and grease, free from any rising damp, with no loose, flaky material. The substrate must be stable, non-deformable, without cracks and have already completed the curing period of hygrometric shrinkage.

Smooth substrates with very low absorption or which are completely non-absorbent, such as ceramic tiles, marble floor tiles, epoxy paints, oxidised vinyl glue residues of adhesives and smoothed concrete coatings which are compact and properly anchored, must be prepared by means of mechanical abrasion or by application of Keragrip Eco, a professional, single-component, water-base adhesion promoter, following the instructions for use. Any substances used for surface treatment, such as wax or parting compounds, must be removed mechanically or using specific chemical products. On screeds and plasters which are compact but very absorbent apply Primer A Eco, a eco-friendly, water-based, surface insulation product, in order to reduce and regulate the level of absorption. Respect the indicated waiting time before carrying out correction of the surface with a levelling product.

### Instruction for use

Prepare Keralevel® Eco LR in a clean container, first of all pouring in a quantity of water equal to approximately  $\frac{3}{4}$  of the amount required. Gradually add Keralevel® Eco LR to the water in the container, mixing the paste with a suitable low-rev ( $\approx 400/\text{min.}$ ) electric mixer. Then add more water until a fluid, smooth, lump-free mortar is obtained. Keralevel® Eco LR is immediately ready for use. The amount of water to be added, indicated on the packaging, is an approximate guide. Adding extra water does not improve the workability of the levelling product, and may cause shrinkage during drying and result in less effective final performance with a reduction in surface hardness, compressive strength and adhesion to the substrate.

Keralevel® Eco LR is generally applied with a smooth trowel. If necessary, the high level of thixotropy of the mixture allows for high levelling thicknesses with just one coating. It is advisable to press down hard with the trowel during application so as to regulate the absorption of water and obtain maximum adhesion to the substrate,. For subsequent laying of ceramic tiles it is always advisable to obtain a roughened surface. Application of a further substrate correction layer must be carried out as soon as the previous layer is ready for foot traffic ( $\approx 2$  hrs) by laying Keragrip, a professional, single-component, water-base adhesion promoter, following the instructions for use. After this interval, it is necessary to wait  $\approx 5 - 7$  days, depending on the thickness created, and then apply Keragrip Eco, after which the subsequent applications may be carried out.

### Tools

Electrical mixer, spreader and trowel. Wash tools with water before the product hardens.

## Special notes

In the case of wooden substrates that are deformable or subject to movement, apply Keragrip Eco professional, water-base, single-component adhesion promoter to the clean substrate, following the instructions for use. Fix a suitable anti-alkali fibre mesh and mix Keralevel® Eco LR with Keraplast Eco P6 latex in place of the mixing water, until the required consistency is obtained.

Continuous, extensive areas need to be fractionized with elastic joints so as to create areas of  $\approx 50 \text{ m}^2$ .

Anhydrite screeds must be dry, sanded and vacuum cleaned according to the manufacturer's instructions and waterproofed with Primer A Eco concentrated, water-base surface insulation, following the instructions for use. For subsequent laying of hardwood floors, create a smooth finish with thickness  $\geq 3 \text{ mm}$ .

## Technical data compliant with Kerakoll Quality Standard

Appearance	pre-mixed	
Apparent volumetric mass	$\approx 1,45 \text{ kg/dm}^3$	UEAtc/CSTB 2435
Mineralogical nature of inert material	silicate - crystalline carbonate	
Grading	$\approx 0 - 600 \mu\text{m}$	UNI 10111
Shelf life	$\approx 6$ months in the original packaging in dry environment	
Pack	bags 25 kg	
Mixing water	$\approx 6 \text{ l} / 1 \text{ bag } 25 \text{ kg}$	
Specific weight of the mixture	$\approx 1,62 \text{ kg/dm}^3$	UNI 7121
Pot life	$\geq 20 \text{ min.}$	
Temperature range for application	from $+5 \text{ }^\circ\text{C}$ to $+30 \text{ }^\circ\text{C}$	
Minimum thickness	$\geq 1 \text{ mm}$	
Maximum thickness obtainable	$\leq 25 \text{ mm}$	
Foot traffic	$\approx 2 \text{ hrs}$	
Waiting time before laying:		
- ceramic tiles, terracotta	$\approx 2 \text{ hrs}$	
- hardwood floors, resilient materials and natural stone	$\approx 12 \text{ hrs}$	
Coverage	$\approx 1.5 \text{ kg/m}^2$ per mm of thickness	

*Values taken at  $+20 \text{ }^\circ\text{C}$ , 65% R.H. and no ventilation. Data may vary depending on specific conditions at the building site, i.e. temperature, ventilation and absorbency level of the substrate.*

## Performance High-Tech

Adhesion to concrete after 28 days	≥ 1 N/mm <sup>2</sup>	EN 13892-8
<b>Resistance to</b>		
- Compressive strength after 28 days	≥ 20 N/mm <sup>2</sup>	EN 13892-2
- flexural after 28 days	≥ 6 N/mm <sup>2</sup>	EN 13892-2
- abrasion after 28 days	≤ 250 mm <sup>3</sup>	EN 12808-2
Surface hardness after 28 days	≥ 30 N/mm <sup>2</sup>	EN 13892-6
Conformity	CT - C20 - F6	EN 13813

*Values taken at +20 °C, 65% R.H. and no ventilation. Data may vary depending on specific conditions at the building site.*

## Warning

### - **Product for professional use**

- do not use Keralevel® Eco LR to correct substrate irregularities greater than 25 mm
- do not add other binders or additives to the mixture
- low temperatures and high relative humidity lengthen drying times
- an excessive quantity of water will reduce strength and the drying time
- before laying hardwood floors and resilient materials, check residual humidity with a calcium carbide hygrometer
- protect from direct sunlight and currents of air for the first 12 hrs
- respect the elastic joints present in the substrate
- if necessary, ask for the safety data sheet
- for any other issues, contact the Kerakoll Worldwide Global Service - [globalservice@kerakoll.com](mailto:globalservice@kerakoll.com)

This information was last updated in October 2010; please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see [www.kerakoll.com](http://www.kerakoll.com)  
KERAKOLL Spa shall therefore be liable for the validity, accuracy and updating of information provided only when taken directly from its institutional website. The technical data sheet given here is based on our technical and practical knowledge. As it is not possible for us to directly check the conditions in your building yards and the execution of the work, this information represents general indications that do not bind Kerakoll in any way. Therefore, it is advisable to perform a preliminary test to verify the suitability of the product for your purposes.