# Keralevel Eco LR

Certified, fast-acting, eco-friendly, mineral levelling product for the high-performance, high-thickness correction of irregular substrates.

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.

- 1. Internal, external
- 2. Thicknesses from 1 to 25 mm
- 3. Prolonged workability, also suitable for large surface areas
- 4. High dimensional stability and long-lasting performance
- 5. High mechanical resistance
- 6. Suitable for laying ceramic tiles, porcelain tiles, natural stone, hardwood floors and resilient materials using adhesives



# Rating 5



- √ Regional Mineral ≥ 60%
- √ Recycled Regional Mineral ≥ 30%
- ∨ CO<sub>2</sub> Emission ≤ 250 g/kg
- √ VOC Low Emission
- Recyclable

# kerakoll

kerakoll Code: F106 2023/02 EN

## Areas of application

#### → Intended use:

Levelling correction of irregular and uneven substrates, with rapid setting and drying and compensated shrinkage. Thicknesses from 1 to 25 mm.

#### Compatible adhesives:

- gel adhesives, mineral adhesives, with SAS technology, single and two-component organic adhesives
- reactive-epoxy and polyurethane, single and two-component cement-based adhesives, dispersed in water or solvent solutions

#### Covering materials:

- porcelain tiles, ceramic tiles, klinker and cotto of all types and formats
- natural stone, recomposed materials, marble
- hardwood flooring, rubber, PVC, linoleum, textiles
- varnishes and paints

#### **Substrates:**

- cement plasters and cement-lime mortar
- mineral screeds made with Keracem Eco Pronto, Keracem Eco Prontoplus, Rekord Eco Pronto and Keracem Eco as a binder or premixed
- cement-based screeds
- prefabricated concrete or fresh concrete castings
- walls in concrete blocks or cellular concrete
- residual traces of cement-based adhesives

Flooring and walls, for internal and external use, in domestic, commercial and industrial applications, underfloor heating systems.

Do not use on gypsum-based plasters/renders and anhydrite screeds without applying the rapid universal adhesion promoter Active Prime Fix; on highly flexible substrates and substrates subject to high thermal expansion, and on plasterboard; on wet substrates or substrates subject to continuous moisture rising.

### Instructions for use

#### → Preparation of substrates

- In general, substrates must be free of dust, oil and grease, free from any moisture rising, with no loose, flaky or imperfectly anchored parts such as residues of cement, lime, paint coatings and adhesives, which must be completely removed. The substrate must be stable, nondeformable, without cracks and have already completed the curing period of hygrometric shrinkage.
- Low-absorption substrates: smooth substrates with very low absorbency level or which are completely non-absorbent, such as ceramic tiles, marble floor tiles, epoxy and wall paints, residual traces of oxidised adhesives and smoothed concrete coatings which are compact and properly anchored, must be prepared by means of mechanical abrasion or by application of the rapid universal adhesion promoter Active Prime Fix or Active Prime Grip, following the instructions for use and after having carried out thorough cleaning of the surface. Any substances used for surface treatment, such as wax or parting compounds, must be removed mechanically or using specific chemical products.
- High-absorbency substrates: on screeds and plasters/renders which are compact but very absorbent, first apply the rapid universal adhesion promoter Active Prime Fix in order to reduce and regulate the level of absorption. In the case of absorbent substrates with weak

consistency, apply Keradur Eco eco-friendly, water-based deep consolidant. Respect the indicated waiting time before carrying out correction of the surface with a levelling product.

#### → Preparation

Prepare Keralevel Eco LR in a clean container, first of all pouring in a quantity of water equal to approximately ¾ of the amount required. Gradually add Keralevel Eco LR to the container, mixing the paste with a low-rev (≈ 400/min.) helicoidal agitator. Add more water until the desired consistency is obtained. The mixture must be of smooth consistency and without any lumps. For best results, and to mix larger quantities of levelling product, a stirring device with vertical blades and slow rotation is recommended. Specific polymers with highdispersion properties ensure that Keralevel Eco LR is immediately ready for use. The amount of water to be added, indicated on the packaging, is an approximate guide. It is possible to obtain mixtures with consistency of variable thixotropy according to the application to be made. Adding extra water does not improve the workability of the product, and may cause shrinkage in the plastic phase of drying and result in less effective final performance with a reduction in surface hardness, compressive strength and adhesion to the substrate.

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### Instructions for use

→ Application

Apply a first layer of the product to the suitably prepared and damped substrate using a smooth spreader. Press down hard to ensure adhesion and to force the air out of the pores, after that, the thickness can be adjusted as required. In the event of high thicknesses apply in more layers until the required thickness is obtained. For limited restorations it is possible to work in a single layer, thanks to the high thixotropic effect of the mixture. The appearance of the surface

finish may vary depending on whether a smooth steel spreader or a sponge spreader has been used for application. For subsequent laying of ceramic tiles it is always advisable to obtain a roughened, porous surface.

→ Cleaning

Residual traces of Keralevel Eco LR can be removed from tools using water before the product hardens.

### Special notes

- → Joints: all the joints located in the substrate must be respected.
  - Deformable substrates: for substrates that are liable to movement, apply the eco-friendly Kerakoll adhesion promoter suitable for the type of substrate, following the instructions for use; embed to the substrate a 4x5 mm anti-alkali mesh; mix Keralevel Eco Ultra with  $\approx 3 \, l$  of Keraplast Eco 337 latex and  $\approx 3 \, l$  of water.
- → Gypsum-based plasters/renders: they must be dry and treated with the rapid universal adhesion promoter Active Prime Fix, following the instructions for use.
- → Anhydrite screeds: they must be dry and sanded as specified in the manufacturer's instructions,

- then treated with the rapid universal adhesion promoter Active Prime Fix, following the instructions for use.
- $\rightarrow$  Large continuous surfaces: continuous, extensive surfaces need to be separated with elastic joints so as to create areas of  $\approx 50 \text{ m}^2$ . In order to improve adhesion to the substrate and insert an anti-alkali mesh with 4x5 mm mesh size, it is recommended, before laying the product, to apply Active Prime Fix or Active Prime Grip, the adhesion promoter, following the instructions provided.
- → Laying hardwood floors: for subsequent laying of hardwood floors, create a smooth finish with thickness ≥ 3 mm.

### Certificates and marks











Émission dans l'air intérieur Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

### **Abstract**

Certified, high-performance correction of substrates from 1 to 25 mm thickness must be carried out using a rapid, high thickness, eco-friendly mineral levelling product, compliant with standard EN 13813 class CT-C20-F6, GreenBuilding Rating 5, such as Keralevel Eco LR by Kerakoll Spa, suitable for subsequent laying of ceramic tiles after  $\approx 2$  hrs and for laying of natural stone, hardwood floors and resilient materials  $\approx 12$  hrs after application, at +20 °C, 65% R.H. Apply the product using a smooth spreader on the previously prepared, clean and dimensionally stable substrate and finish with a rigid float. Average coverage:  $\approx 1.3$  kg/m² per mm of thickness created.



Technical Data compliant with Kerakoll Quality Standard				
Apparent volumetric mass	$\approx 1.45 \text{ kg/dm}^3$	UEAtc/CSTB 2435		
Mineralogical nature of inert material	silicate - crystalline carbonate			
Grading	≈ 0 − 600 µm	UNI 10111		
Shelf life	≈ 6 months from production in the original sealed packaging, protect from humidity			
Pack	25 kg bags			
Mixing water	≈ 6 l / 1 25 kg bag			
Specific weight of the mixture	≈ 1.62 kg/dm3	UNI 7121		
Pot life	≥ 20 min.			
Temperature range for application	from +5 °C to +30 °C			
Maximum thickness	from 1 mm to 25 mm			
Foot traffic	≈ 2 hrs			
Waiting time before laying:				
- ceramic tiles, terracotta	≈ 2 hrs			
- hardwood floors, resilient materials and natural stone	≈ 12 hrs			
Coverage	≈ 1.3 kg/m² per mm of thickness			

Values taken at +20 °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.

VOC Indoor Air Quality (IAQ) - Volatile organic compound emissionsConformityEC 1 plus GEV-EmicodeGEV certified 2951/11.01.02HIGH-TECHAdhesion to concrete after 28 days $\geq 1 \text{ N/mm}^2$ EN 13892-8Resistance to:- Compressive strength after 28 days $\geq 20 \text{ N/mm}^2$ EN 13892-2- flexural after 28 days $\geq 6 \text{ N/mm}^2$ EN 13892-2- abrasion after 28 days $\leq 250 \text{ mm}^3$ EN 12808-2	Performance				
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- flexural after 28 days $\geq$ 6 N/mm <sup>2</sup> EN 13892-2 - abrasion after 28 days $\leq$ 250 mm <sup>3</sup> EN 12808-2	Resistance to:				
- abrasion after 28 days ≤ 250 mm³ EN 12808-2	Compressive strength after 28 days	≥ 20 N/mm <sup>2</sup>	EN 13892-2		
	flexural after 28 days	≥ 6 N/mm²	EN 13892-2		
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Surface nardness after 20 days 2 30 N/mm <sup>2</sup> EN 13692-0	Surface hardness after 28 days	≥ 30 N/mm <sup>2</sup>	EN 13892-6		
Conformity CT – C20 – F6 EN 13813	Conformity	CT - C20 - F6	EN 13813		

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### Warning

- → Product for professional use
- → abide by any standards and national regulations
- → do not use Keralevel Eco LR for levelling purposes or for the correction of 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 moisture 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 +39 0536 811 516 globalservice@kerakoll.com

Kerakoll Quality System ISO 9001 CERTIFIED Kerakoll Quality System ISO 14001 CERTIFIED Kerakoll Quality System ISO 45001 CERTIFIED The Rating classifications refer to the GreenBuilding Rating Manual 2013. This information was last updated in January 2023 (ref. GBR Data Report – 02.23); please note that additions and/or amendments may be made over time by KERAKOLL SpA; for the latest version, see 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 years 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.