

Keralevel® Eco

Certified, thixotropic, eco-friendly, normal-setting mineral levelling product for the high-performance correction and extended workability of irregular substrates, ideal for use in GreenBuilding. With very low volatile organic compound emissions, recyclable as an inert material at the end of its life.

Keralevel® Eco develops extended workability times, thereby guaranteeing the correction of large surfaces even in extreme climatic conditions with a smooth finish that is ideal for the subsequent laying of coverings using eco-friendly adhesives.



GREENBUILDING RATING®

Keralevel® Eco

- Category: Inorganic mineral products
- Preparation of the substrates



Very low VOC emissions

Can be recycled as inert material

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

PRODUCT STRENGTHS

- Internal, external
- Suitable for laying ceramic and porcelain tiles, natural stone, hardwood floors and resilient materials using adhesives



AREAS OF USE

Use

Levelling of irregular substrates with normal setting and compensated shrinkage. Thicknesses up to 10 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 of all types and formats
- natural stone, recomposed materials, marble
- hardwood floors, textiles, rubber, PVC, linoleum
- varnishes and paints

Substrates:

- cement plasters and cement-lime mortar
- walls in concrete blocks or cellular concrete
- mineral screeds made with Keracem® Eco Pronto, Keracem® Eco Pronto plus, Rekord® Eco Pronto and Keracem® Eco as a binder or pre-mixed
- cement-based screeds
- residual traces of cement-based adhesives
- concrete
- reinforced concrete

Flooring and walls, for internal and external use, in domestic, commercial and industrial applications and on heat-radiant slabs.

Do not use

On gypsum-based plasters/renders and anhydrite screeds without the use of the certified, eco-friendly, water-based primer Primer A Eco; on highly flexible substrates and substrates subject to high thermal expansion, and on plasterboard; on wet substrates or substrates subject to continuous moisture rising.

* 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).

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, non-deformable, 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 Keragrip Eco, the water-based, eco-friendly adhesion promoter, 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.

Highly absorbent substrates: on screeds and plasters which are compact but very absorbent, first apply the certified, eco-friendly, water-based primer Primer A Eco 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 in a clean container by pouring in $\approx \frac{3}{4}$ of the water required. Gradually add Keralevel® Eco to the water, mixing the paste with a low-rev (≈ 400 /min.) helicoidal agitator. Add water until a homogeneous, lump-free mortar is obtained. The amount of water to be added, indicated on the packaging, is an approximate guide.

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. If an additional correction layer is required, it must be applied as soon as the previous layer has hardened (approximately 24 hrs at +23°C 50% R.H.) after application of diluted Primer A Eco being always careful to apply adequate pressure to ensure maximum adhesion. 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 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: if substrates are liable to movement, apply the Kerakoll® eco-friendly adhesion promoter suitable for the type of substrate, following the instructions for use. Attach an anti-alkali 4x5 mm size mesh and mix Keralevel® Eco Ultra with $\approx 3,3$ l of Keraplax Eco 337 latex and $\approx 3,3$ l of water.

Gypsum-based plasters/renders: they must be dry and treated with the certified, eco-friendly, water-based primer Primer A Eco, following the instructions for use.

Anhydrite screeds: they must be dry and sanded according to the manufacturer's instructions, then treated with the certified, eco-friendly, water-based primer Primer A Eco, following the instructions for use.

ABSTRACT

Certified, high-performance levelling of substrate from 1 to 10 mm thickness must be carried out using a thixotropic eco-friendly mineral levelling product, with normal setting and prolonged workability, such as Keralevel® Eco by Kerakoll Spa, compliant with EN 13813 class CT-C25-F6, GreenBuilding Rating® 2, suitable for subsequent laying of tiles after 12 – 24 hrs and for laying of natural stone, parquet and resilient materials $\approx 3 - 5$ days after application, at +23°C 50% 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: ≈ 1.5 kg/m² per mm of thickness created.

TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

| | | |
|--|---|------------------|
| Appearance | pre-mixed | |
| Specific weight | ≈ 1.45 kg/dm ³ | UEAtc/CSTB 2435 |
| Mineralogical nature of inert material | crystalline carbonate | |
| Grading | $\approx 0 - 600$ μ m | UNI 10111 |
| Shelf life | ≈ 12 months from production in the original sealed packaging, protect from humidity | |
| Pack | 25 kg bags | |
| Mixing water | ≈ 6.5 l / 1 x 25 kg bag | |
| Specific weight of the mixture | ≈ 1.86 kg/dm ³ | UNI 7121 |
| Pot life | ≥ 4 hrs | |
| Temperature range for application | from +5 °C to +35 °C | |
| Maximum thickness | from 1 to 10 mm | |
| Foot traffic | ≈ 24 hrs | |
| Waiting time before laying: | | |
| - ceramic tiles, terracotta | ≈ 24 hrs | |
| - hardwood floors, resilient materials and natural stone | | ≈ 3 days |
| Coverage | ≈ 1.5 kg/m ² 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.

PERFORMANCE

VOC INDOOR AIR QUALITY (IAQ) - VOLATILE ORGANIC COMPOUND EMISSIONS

| | | |
|--------------------------------------|------------------------|-----------------------------|
| Conformity | EC 1 plus GEV-Emicode | GEV certified 2954/11.01.02 |
| HIGH-TECH | | |
| Adhesion to concrete after 28 days | ≥ 1 N/mm ² | EN 13892-8 |
| Resistance to: | | |
| - compressive strength after 28 days | ≥ 25 N/mm ² | EN 13892-2 |
| - flexural after 28 days | ≥ 6 N/mm ² | EN 13892-2 |
| - abrasion after 28 days | ≤ 250 mm ³ | EN 12808-2 |
| Surface hardness after 28 days | ≥ 40 N/mm ² | EN 13892-6 |
| Conformity | CT – C25 – 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

- abide by any standards and national regulations
- do not use Keralevel® Eco for levelling purposes or for the correction of substrate irregularities greater than 10 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

The Rating classifications refer to the GreenBuilding Rating® Manual 2013. This information was last updated in November 2020 (ref. GBR Data Report - 1220); 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 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.



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