

# Keratech® Eco Plus

**Certified, extra-rapid hardening, eco-friendly, self-levelling mineral product for the correction of irregular substrates with a smooth finish before laying resilient materials and prefinished hardwood floors, ideal for use in GreenBuilding. Low CO<sub>2</sub> emissions and very low volatile organic compound emissions, recyclable as an inert material at the end of its life.**

Keratech® Eco Plus rapidly develops a smooth finish and perfectly even surfaces with high levels of mechanical resistance, allowing resilient materials and prefinished hardwood floors to be safely laid in any application.



**GREENBUILDING RATING®**

**Keratech® Eco Plus**

- Category: Inorganic mineral products
- Preparation of the substrates
- Rating: Eco 4

	Natural mineral content 73%		CO <sub>2</sub> /kg emission 175 g	Very low VOC emissions	Can be recycled as inert material

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

**PRODUCT STRENGTHS**

- For internal use
- Ideal for laying textile coverings, PVC, linoleum, and rubber in civil, sports and industrial applications and prefinished hardwood floors
- Thickness from 1 to 10 mm
- Long self-levelling time and extra-rapid hardening
- HDE technology with extended flow
- High dimensional stability and long-lasting performance
- Recyclable as an inert material at the end of its life

**ECO NOTES**

- Formulated with locally-sourced minerals meaning lower greenhouse gas emission during transportation
- Contains hypoallergenic cements for added operator safety

**AREAS OF USE**

**Use**  
Self-levelling adjustment of irregular and uneven substrates, with extra-rapid setting and drying, compensated shrinkage and very low TVOC – Total Volatile Organic Compound. Made with hypoallergenic, low chromate content cements. Thickness from 1 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:**

- hardwood floors, PVC, linoleum, rubber in domestic, industrial and sports applications, prefinished hardwood floors, textiles and cork
- raised floors
- porcelain tiles, ceramic tiles, klinker and cotto of all types and formats
- natural stone, recomposed materials, marble

**Substrates:**

- mineral screeds made with Keracem® Eco Pronto and Keracem® Eco as a binder or pre-mixed
- cement-based screeds
- prefabricated concrete or fresh concrete castings
- residual traces of cement-based adhesives

Interior floors in residential, commercial and industrial buildings, underfloor heating systems.

**Do not use**  
In external applications, on high flexible substrates subject to thermal expansion, on wet surfaces or substrates subject to moisture rising or which are in continuous contact with water.

## 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 surfaces:** smooth surfaces with very low absorption or which are completely non-absorbent, such as ceramic tiles, marble floor tiles, epoxy paints, residues of oxidised adhesives and smoothed concrete layers which are compact and properly anchored, must be prepared by applying Keragrip Eco, an eco-friendly adhesion promoter, following the instructions for use. If necessary, also use in advance the mechanical abrasion. Any substances used for surface treatment, such as wax or parting compounds, must be removed mechanically or using specific chemical products.

**High-absorption substrates:** on substrates which are compact but very absorbent, apply Primer A Eco to reduce and regulate the level of absorption. Respect the indicated waiting time before carrying out correction of the surface with a self-levelling product.

### Preparation

Prepare Keratech® Eco Plus in a clean container, first of all pouring in a quantity of water equal to approximately ¾ of that which will be required. Gradually add Keratech® Eco Plus to the container, mixing the paste with a low-rev (≈ 400/min.) agitator; then add more 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

Keratech® Eco Plus is applied with a smooth spreader or a pump for plasters. A subsequent, second layer of levelling coat must be applied as soon as the first is ready for foot traffic, or after ≈ 5 days, following application of Primer A Eco or Keragrip Eco.

### Cleaning

Residual traces of Keratech® Eco Plus can be removed with water before the product hardens.

## SPECIAL NOTES

**Joints:** it is advisable to desolidarise the self-levelling surface around the perimeter along the whole perimeter of the room, on the walls and on any other vertical elements protruding from the supporting layer. Large and continuous surface areas need to be fractionized as soon as they can withstand foot traffic so to create areas < 50 m<sup>2</sup> with 8 m maximum individual size. All the joints located in the substrate must be respected.

**Special substrates:** anhydrite screeds must be dry and sanded as specified in the manufacturer's instructions, then prepared with water-based, eco-friendly surface isolation Primer A Eco, following the instructions for use.

**Fine smoothing layers:** applications from 0 to 1 mm of thickness refer to smooth finishes which fill the porosity of a substrate without increasing thicknesses. It is advisable to reduce and uniform the absorption of substrates by applying Primer A Eco.

**Floors with points of concentrated load:** in the case of flooring which has to bear concentrated loads and withstand the strain of furniture fitted with castors, apply a coat of Keratech® Eco Plus ≥ 1 mm (EN 12529).

**Laying hardwood floors:** for subsequent laying of hardwood floors, create a smooth finish with thickness ≥ 3 mm.

## TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

Appearance	Grey pre-mixed	
Specific weight	≈ 1,04 kg/dm <sup>3</sup>	UEAtc/CSTB 2435
Mineralogical nature of inert material	Silicate - crystalline carbonate	
Grading	≈ 0 – 400 µm	UNI 10111
Shelf life	≈ 6 months in the original packaging in dry environment	
Pack	25 kg bags	
Mixing water	≈ 6.8 ℓ / 1 x 25 kg bag	EN 12706
Specific weight of the mixture	≈ 2,02 kg/dm <sup>3</sup>	UNI 7121
Pot life	≥ 20 min.	EN 12706
Self levelling time	≥ 20 min.	CSTB 2893-370
Temperature range for application	from +5 °C to +30 °C	
Maximum thickness	from 1 mm to 10 mm	
Waiting time before laying:		
- resilient materials	≈ 12 hrs	
- hardwood floors	≈ 24 hrs	
Coverage	≈ 1.6 kg/m <sup>2</sup> 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-R plus GEV-Emicode	GEV certified 965/11.01.02
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### HIGH-TECH

Adhesion to concrete after 28 days	$\geq 2,5 \text{ N/mm}^2$	EN 196/1
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#### Resistance to:

- compressive strength after 28 days	$\geq 30 \text{ N/mm}^2$	EN 13892-2
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- flexural after 28 days	$\geq 7 \text{ N/mm}^2$	EN 13892-2
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- parallel strain on laying level after 28 days	$\geq 3 \text{ N/mm}^2$	UNI 10827
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- abrasion after 24 hrs	$\leq 200 \text{ mm}^3$	EN 12808-2
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Surface hardness after 28 days	$\geq 45 \text{ N/mm}^2$	EN 13892-6
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Conformity	CT – C30 – F7	EN 13813
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*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 add other binders, inert materials, additives or water to the mixture during the setting phase
- low temperatures and high relative humidity lengthen drying times
- an excessive quantity of water reduces mechanical resistance and the rapidity of drying
- before laying covering materials, check residual moisture with a calcium carbide hygrometer
- the setting process of the product may be slowed down without any alteration of the final results
- protect from direct sunlight and air currents during the drying phase
- respect the structural joints present in the substrate
- if necessary, ask for the safety data sheet
- for unstable wooden types, particular substrates and other conditions, please contact the Kerakoll Worldwide Global Service 01527 578000 – info@kerakoll.co.uk

The Eco and Bio classifications refer to the GreenBuilding Rating® Manual 2012. This information was last updated in August 2018 (ref. GBR Data Report - 08.18); 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.