

EP21 Rapid

Rapid-hardening, organic resin for the consolidation of absorbent substrates, the creation of finishings and epoxy screeds, and waterproofing of cement-based substrates with high residual humidity.

EP21 Rapid raises the mechanical resistance of inconsistent substrates and waterproofs them to protect hardwood floors from residual humidity, for a quick laying.



Rating 3

1. Ideal for applications at low temperatures
2. Ideal for corrections and rapid hardening repairs
3. 100% solid content
4. Very high consolidation effectiveness
5. Up to 5% CM high residual humidity waterproofing product
6. Ideal for applications in poorly ventilated areas and in renovation work
7. Suitable for the consolidation of substrates even with underfloor heating systems
8. Specifically intended for low-absorption substrates

- ✓ VOC Low Emission
- × Water Based
- ✓ Solvent \leq 15 g/kg
- × Low Ecological Impact
- ✓ Health Care

Areas of application

→ Use

Consolidation of absorbent substrates and waterproofing of absorbent cement-based substrates with high residual humidity (MC max 5% CM – RH max 90%).

Compatible adhesives:

- organic mineral reactive two-component adhesives
- organic mineral reactive single-component adhesives
- reactive single-component and two-component adhesives

Substrates:

- mineral screeds
- calcium sulphate screeds
- cement-based screeds
- heated subfloors

For internal and external use, in domestic and commercial environments. Suitable for the consolidation of substrates even with underfloor heating systems.

Do not use on non-absorbent substrates (marble, ceramic, etc.); on substrates subject to moisture rising; to waterproof cement-based heated screeds with residual humidity > 2% CM; to waterproof calcium sulphate screeds with residual humidity > 0.5% CM or heated anhydrite screeds with residual humidity > 0.2% CM; to waterproof damp-sensitive substrates. Do not use if the temperature of the substrate is not at least 3 °C above the dew point.

Instructions for use

→ Preparation of substrates

Substrates must be absorbent, dimensionally stable, non-deformable, clean and free of any moisture rising, cracks and separating substances.

Any cracks must be repaired with Kerarep. Substrates with a compact, low-absorption surface layer must be roughened and have dust carefully removed to allow the EP21 Rapid to penetrate. Prepare calcium sulphate screeds according to the manufacturer's instructions.

→ Preparation

Pour Part A into a clean container, and add Part B in the ratio of Part A : Part B = 2 : 1 and mix carefully, preferably with an electric mixer with a rotation speed of 300 – 600 rpm, until the mixture is uniform.

→ Application

- As a surface reinforcement: dilute with Keragrip Eco Pulep at 15% according to the absorbency of the substrate and apply evenly with a brush or roller in a single coat, with a coverage of $\approx 0.2 \text{ kg/m}^2$. When applying on substrates that do not guarantee complete absorption of EP21 Rapid, spread the coat of the product with Quarzo 5.12 while it is still fresh.

- As a deep reinforcement: dilute with Keragrip Eco Pulep at 30% according to the absorbency of the substrate and apply evenly with a brush or roller in a single coat, with a coverage of $\approx 0.3 - 0.4 \text{ kg/m}^2$. When applying on substrates that do not guarantee complete absorption of EP21 Rapid, spread the coat of the product with Quarzo 5.12 while it is still fresh.
- To prepare epoxy mortars: for high-performance repairs, mix with Quarzo 5.12 or dry sand until a mixture of appropriate consistency is obtained (approximately 1 part EP21 Rapid and 8-10 parts sand); apply wet-on-wet only after having primed the area with the same product.
- To prepare epoxy screeds: mix with Quarzo 5.12 until a mixture of appropriate consistency is obtained (approximately 1 part EP21 Rapid and 8 – 10 parts Quarzo 5.12 with a consumption of $\approx 0.2 \text{ kg/mm/m}^2$ of EP21 and $1.6 - 2 \text{ kg/mm/m}^2$ of Quarzo 5.12); apply wet-on-wet only after having primed the area with the same product.

Instructions for use

- As waterproofing (max. residual humidity max MC 5% CM or 90% RH): dilute with Keragrip Eco Pulep at 15% according to the absorbency of the substrate and apply the first coat evenly with a brush or roller. When fully dry, apply the second coat of product as it is. Use coverage of $\approx 0.3 - 0.4 \text{ kg/m}^2$. When applying on substrates that do not guarantee complete absorption of EP21 Rapid, spread the final coat of the product with Quarzo 5.12 while it is still fresh.
- As a primer and as a surface consolidant in Factory systems: dilute with Keragrip Eco Pulep up to 30% and apply an amount that can be fully absorbed by the substrate evenly using a roller or spreader. Should there be any accidental build-up of product or incomplete absorption, it is necessary, using suitable tools, to eliminate the excess product and to rough the surface to guarantee sufficient grip; finally, vacuum up the waste carefully before proceeding with subsequent applications.

Generally speaking, coats of other products must be applied within a maximum of 30 hours. If waiting times are longer the surface must be sanded to make it rough and any sanding waste must be eliminated using extraction equipment before applying the next coat.

- Cleaning
The product can be removed from tools with a suitable thinner. After EP21 Rapid has hardened it can only be removed mechanically.

Special notes

- Direct bonding with reactive two-component mineral organic adhesives or application of resin-based systems must be carried out within a few days after EP21 Rapid has hardened; longer waiting times may cause adhesion problems. If a longer wait is anticipated, the final coat of EP21 Rapid should be sprinkled with Quarzo 5.12 or Quarzo 1.3 while it is still fresh.
- When bonding with reactive, single component, organic mineral adhesives, always spread the last coat of EP21 Rapid with Quarzo 5.12 or Quarzo 1.3 while it is still fresh.
- Before the next application with a cement-based levelling and self-levelling products apply Keragrip Eco on EP21 Rapid when fully dry, or sprinkle the last coat of EP21 Rapid with Quarzo 5.12 while it is still fresh.

Certificates and marks



Technical Data compliant with Kerakoll Quality Standard

Appearance:

- Part A	transparent liquid
- Part B	straw yellow transparent liquid

Shelf life ≈ 12 months from the date of production in original and intact packaging

Warning protect from frost, avoid direct exposure to sunlight and sources of heat

Pack part A 2 kg can - part B 1 kg bottle

Temperature range for application from +10 °C to +35 °C

Mixing ratio Part A : Part B = 2 : 1

Dilution Keragrip Eco Pulep (max 30%)

Pot life ≈ 10 min.

Open time ≈ 10 min.

Waiting time between the coats ≈ 1 – 2 hrs

Waiting time for next application ≈ 2 – 3 hrs

Coverage:

- to stabilise on the surface	≈ 0.2 kg/m ²
- to strengthen on and below the surface	≈ 0.3 – 0.4 kg/m ²
- to create epoxy screeds (mixing ratio EP21 Rapid:Quarzo 5.12=1:10)	≈ 0.2 kg/m ² per mm of thickness
- to use as moisture barrier against residual humidity	≈ 0.3 – 0.4 kg/m ²

Values taken at +23 °C, 50% 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
9150/11.01.02

Warning

- Product for professional use
- abide by any standards and national regulations
- wait until the product is fully dry and the solvent has evaporated before proceeding with subsequent steps. This period will differ depending on environmental conditions, how well the premises are ventilated, the nature of the substrate, and the quantity applied
- aerate all environments during and after use until the product has fully hardened
- if necessary, ask for the safety data sheet
- for any other issues, contact the Kerakoll Worldwide Global Service 01772 456 831 - info@kerakoll.co.uk



The Rating classifications refer to the GreenBuilding Rating Manual 2012. This information was last updated in December 2022 (ref. GBR Data Report – 12.22); 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 site 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.