

Keracem® Eco Pronto

Certified, ready-to-use, eco-friendly, normal-setting and rapid-drying mineral screed to be covered with adhesives, ideal for use in GreenBuilding. With low CO₂ emissions and very low volatile organic compound emissions, contains recycled raw materials. Recyclable as an inert material at the end of its life.

Keracem® Eco Pronto develops excellent thermal conductivity that is essential in underfloor heating systems to allow the system to quickly reach optimal efficiency and an even distribution of heat.



GREENBUILDING RATING®

Keracem® Eco Pronto

- Category: Inorganic mineral products
- Preparation of the substrates
- Rating: Eco 5

	Natural mineral content 88%	Recycled mineral content 50%	CO ₂ /kg emission 85 g	Very low VOC emissions	Can be recycled as inert material

RATING SYSTEM ACCREDITED BY CERTIFICATION BODY SGS

PRODUCT STRENGTHS

- Internal, external
- Ready-to-use, ensures constant levels of performance
- Ideal in renovation work
- Approved for marine use
- High dimensional stability and long-lasting performance
- High mechanical resistance for screeds subject to heavy traffic
- Suitable for laying ceramic tiles, porcelain tiles, natural stone, hardwood floors and resilient materials using adhesives

ECO NOTES

- Formulated with locally-sourced minerals meaning lower greenhouse gas emission during transportation
- Contains recycled minerals thereby reducing the damage to the environment caused by extracting pure raw materials
- Can be recycled as mineral inert material, avoiding waste disposal costs and environmental impact

AREAS OF USE

Use
Normal-setting, rapid-drying screeds. Screeds adhering to the substrate (thickness ≥ 20 mm) and floating screeds (thickness ≥ 40 mm). Maximum thickness 80 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:

- homogeneous tiles, ceramic tiles, klinker, cotto, glass and ceramic mosaic, of all types and formats
- natural stone, recomposed materials and marble including those subject to high deformation or rapid staining due to water absorption
- hardwood floors, rubber, PVC, linoleum, carpeting

Substrates:

- insulation castings and flooring in prefabricated concrete or fresh concrete castings, cement-based screeds, lightened concrete, panels for sound-proofing and thermal isolation

Screeds for internal/external use, in domestic, commercial and industrial applications, also in areas subject to thermal shock and freezing, underfloor heating systems.

Do not use
On deformable substrates, without having previously calculated the degree of flexure and having provided for the necessary fractionizing joints on the screed; in adherence on concrete castings which have not yet fully cured.

Keracem® Eco Pronto Code: F101 2018/08-UK

INSTRUCTIONS FOR USE

Preparation of substrates

Substrates must be dimensionally stable in accordance with BS 8204, clean, dry, free from any rising damp, without cracks, free from dust and loose, crumbling parts and must present a degree of stability suitable for its use. The screed to be covered must be separated from all vertical elements by means of a band of flexible material with a thickness of $\approx 8 - 10$ mm, along the entire height of the screed. The structural joints present in the substrate must be created accordingly also in the thickness of the screed.

Bonded screeds: to improve adhesion to the substrate apply a slurry key "wet on wet", prepared with 2.5 parts Keracem® Eco (or 32.5/42.5 Portland cement), 1 part eco-friendly, water-based Keraplast Eco P6 latex and 1 part water.

Floating screeds: when laying water-sensitive flooring, in case of substrates in which there is a risk of rising damp and substrates that have not been cured completely it is essential that a damp protection barrier is laid in compliance with current BS 8204.

On lightened, low-density substrates or in the presence of layers (also thin layers) of thermal/acoustic insulating materials, the screed thickness will depend on the deformability class and load-bearing capacity of the materials mentioned.

Instruction for use

Keracem® Eco Pronto must be mixed with clean water, using normal building-site equipment such as a cement mixer and pressure mixers and following the indicated water/Keracem® Eco Pronto mixing ratio, until a plastic consistency has been obtained. Keracem® Eco Pronto can be applied in a practical manner, following the traditional phases required to produce cement-based screeds. The screed can be machine or hand-finished while still fresh. Adjust compacting according to the final finish required. If too much water is used this may result in shrinkage and cracking and a longer drying time. Immediately after application and compacting of the screed, adjust the surface using a metal flattener and seal the surface itself using a float. The finish of the screed, carried out by moistening it with water and using a rotating steel disk, very often results in the creation of a surface crust which is not very absorbent and will extend the screed drying time.

Tools

Pressure mixers for screeds, concrete mixer. Wash machines with water before the product hardens.

SPECIAL NOTES

Joints: screed must be desolidarised around the perimeter along the whole perimeter of the room, on the walls and on any other vertical elements protruding from the supporting layer.

Creating fractionizing surface joints, cutting the screed while still wet up to a depth that is about $\frac{1}{3}$ of the thickness and paying attention not to damage the reinforcement grid, if present. Their location and space distance must be determined at the design stage. They are typically carried out:

- in the case of sudden change in the size of flooring,
- near doors,
- in the presence of elements with loss of continuity,
- for the fractionizing of large continuous surfaces:

25 m² with 6 m maximum individual size, in case of external screeds

50 m² with 8 m maximum individual size, in case of internal screeds (40 m² in case of underfloor heating systems).

Structural joints located in the substrate must be respected.

Measurement of humidity: residual humidity can be measured correctly only with a calcium carbide hygrometer. Normal electrical hygrometers are not recommended, as they provide inconsistent and incorrect values due to the special binders used.

Underfloor heating systems: initial start-up at least 5 days after laying the screed at a supply temperature of between +20 °C and +25 °C, maintain this for at least 3 days then set the maximum project temperature and maintain it for at least another 4 days. Bring the screed back to room temperature and lay (EN 1264-4 point 4.4).

TECHNICAL DATA COMPLIANT WITH KERAKOLL QUALITY STANDARD

Appearance	Mixture of binders and aggregates	
Apparent volumetric mass	≈ 1.65 kg/dm ³	UEAtc/CSTB 2435
Mineralogical nature of inert material	Silicate - crystalline carbonate	
Grading	≈ 0 – 5 mm	UNI 10111
Shelf life	≈ 12 months in the original packaging in dry environment	
Pack	25 kg bags	
Mixing water	≈ 1.7 ℓ / 1 x 25 kg bag	
Specific weight of the mixture	≈ 1.95 kg/dm ³	UNI 7121
Pot life	≥ 3 hrs	
Temperature range for application	from +5 °C to +35 °C	
Floating screed thicknesses	from 40 mm to 80 mm	
Thicknesses of the adherent screed	from 20 mm to 80 mm	
Foot traffic	≈ 8 hrs	
Waiting time before laying (thickness 5 cm):		
- ceramic tiles	≈ 24 hrs	
- hardwood floors	≈ 5 days	
Coverage	≈ 16 – 18 kg/m ² per cm 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 3106/11.01.02
HIGH-TECH		
Resistance to strain parallel to the laying surface	≥ 2.4 N/mm ²	UNI 10827
Resistance to:		
- compressive strength after 5 days	≥ 20 N/mm ²	EN 13892-2
- compressive strength after 28 days	≥ 30 N/mm ²	EN 13892-2
- flexural after 28 days	≥ 6 N/mm ²	EN 13892-2
Residual moisture (thickness 5 cm):		
- after 24 hrs	≤ 3%	
- after 5 days	≤ 2%	
Thermal conductivity coefficient λ	1.47 W/(m K)	Inst. Giordano 235103
Conformity	CT – C30 – 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 add other binders, additives or inert materials to the mixture
- low temperatures and high relative humidity lengthen the drying time of the screed
- 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
- do not add water to Keracem® Eco Pronto during the setting phase
- do not moisten the screed and protect it from direct sunlight and currents of air for the first 24 hrs
- if necessary, ask for the safety data sheet
- for any other issues, 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. 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.