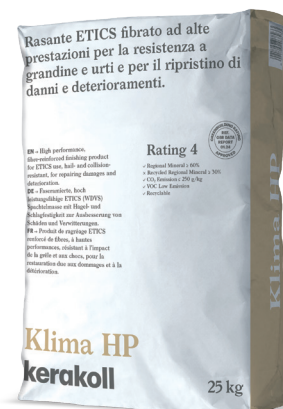


Klima HP

High performance, fibre-reinforced finishing product for ETICS use, hail- and collision-resistant, for repairing damages and deterioration.

Large-grain, finishing product for insulation for finishing of ETICS systems on heat-insulating panelling systems such as EPS and mineral wool on concrete, brick, cement-based plaster/render, mineral and cement-based finishing products. White, external.



Rating 4

1. Certificate of suitability finishing product for ETICS use, Quality Mark No. 001/23 issued by ITC-CNR according to EAD 040083-00-0404
2. High resistance to shocks (up to 60 Joules), according to UNI EN 13497, even on repaired ETICS systems
3. Excellent resistance to hail (up to class HIR 4), according to VKF N° 08
4. Excellent workability
5. Suitable for ETICS systems with synthetic and mineral panels
6. Suitable for Klimaexpert Fire Protection kits

- ✓ Regional Mineral $\geq 60\%$
- × Recycled Regional Mineral $\geq 30\%$
- ✓ CO₂ Emission ≤ 250 g/kg
- ✓ VOC Low Emission
- ✓ Recyclable

Areas of application

→ Use

Finishing with high resistance to hail and shocks for new panelling insulation systems or existing ones to be restored:

- KlimaExpert High Performance EPS and MW Kit
- KlimaExpert High Performance EPS and MW Repair Kit
- Klimaexpert Fire Protection Kit

External use, on heat-sealed external insulating systems (ETICS) such as EPS and mineral wool on concrete, brick, cement-based render, mineral and cement-based finishing products.

Do not use on walls coated with gypsum or ready-mixed gypsum-based plasters; to apply ceramic or natural stone tiles; on wooden or metal supports.

Instructions for use

The instructions for use refer, where required, to the Italian Technical Report UNI / TR 11715 "Heat-insulating products for buildings - Design and installation of external heat-insulating systems (ETICS)".

→ Preparation of substrates (UNI / TR 11715 - paragraph 9)

Heat-sealed panels must be laid without gaps between joints: any joint must be filled with pieces of the same heat-sealed panel if the joint width is > 5 mm, or with suitable polyurethane foam if the joint width is ≤ 5 mm. The surface of the laid heat-insulating panels must be even. In the case of unevenness, irregularities in the panel surface must be levelled out. Specifically:

- for synthetic panels (EPS, PU), irregularities must be removed by light abrasion; dust from sanding must be removed,
- for mineral wool panels (MW), irregularities must be levelled out by means of a compensating finishing product coat using the finishing product itself.

Panels must be laid with offset joints, with the heads offset at the corners; ensure continuity of the insulating layer at the corners of the openings (doors, windows, etc.). The designer will determine the quantity and positioning of the inserts.

Do not apply on substrates when the temperature is less than $+5$ °C or above $+30$ °C.

→ Preparation

Klima HP is prepared by mixing 25 kg of powder with the amount of water indicated on the bag. The mixture is obtained by pouring water into the clean container and then gradually adding the powder. The mixing process can be performed in a horizontal cement mixer or in a bucket (working manually or with a low-rev, mechanical stirring device) until a smooth and lump-free mortar is obtained.

→ Application (UNI / TR 11715 - paragraph 9)

Using a smooth spreader, apply as first coat an even layer on heat-sealed panels for ETICS use; then, embed a suitable mesh for ETICS use into the layer while it is still wet, pressing it with the spreader. Once the first coat has dried, apply a second coat over the top, covering the mesh completely to create a finished surface which, on drying, can be used to lay high-thickness decorative coverings. Strictly follow the laying indications and respect temperatures; during the entire application phase, protect Klima HP from direct sunlight by shielding the scaffolding until the product is dry. On completion, the panels must be protected from rain for at least 48 hours. Klima HP can be applied by spraying using plastering machines if the use of a reinforcing mesh is envisaged. Klima HP must only be applied by hand without using a reinforcing mesh when repairing damaged ETICS systems, as required by the "KlimaExpert site manual. Maintenance and repair of thermal insulation panelling systems".

For high-thickness applications of Klima HP, in addition to following all the instructions described above, apply subsequent several coats, always waiting for the previous one to harden. Be careful to always insert the reinforcing mesh in the outer third of the total thickness of the finishing layer you intend to create and not to exceed 3 mm of thickness per coat.

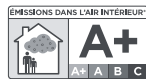
→ Cleaning

Residual traces of the product can be removed from tools using plain water before the product has hardened.

Abstract

The finishing of thermal insulation panel highly resistant to hail (up to class HIR 4) and shocks (up to 60 Joules) will be carried out on an even, solid, clean and dry substrate, after insertion of the alkali-resistant glass fibre mesh for ETICS use by Kerakoll Spa between the two coats. Panels will be finished with a finishing product for ETICS use, fibre-reinforced, highly resistant to hail and shocks ; for the repair of damages and deteriorations, such as Klima HP by Kerakoll Spa, specifically designed for the creation of panelling insulation systems and the repair of existing damaged ETICS systems. Coverage will be $\approx 1.10 \text{ kg/m}^2$ for the finishing coat per mm of thickness.

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).

Technical Data compliant with Kerakoll Quality Standard

Appearance	White pre-mixed	
Apparent density of dry, hardened product	1.17 kg/dm ³	EN 1015-10
Mineralogical nature of inert material	silicate - crystalline carbonate	
Nominal Grading	$\approx 0 - 1400 \mu\text{m}$	
Ash content at +450 °C	92,80%	EAD 040083-00-0404
Ash content at +900 °C	62,50%	EAD 040083-00-0404
Shelf life	≈ 12 months in the original packaging in dry environment	
Pack	25 kg bags	
Mixing water	$\approx 7 - 7.5 \text{ l} / 1 \times 25 \text{ kg bag}$	
Specific weight of the mixture	$\approx 1,35 \text{ kg/dm}^3$	EN 1015-6
Pot life	≥ 5 hrs	
Temperature range for application	from +5 °C to +30 °C	
Maximum thickness obtainable	≤ 10 mm with mesh inserted in the outermost third of the finishing product coat	
Maximum thickness obtainable per coat	≤ 3 mm	
Coverage	$\approx 1.10 \text{ kg/m}^2$ per mm of thickness	

Values taken at +23 °C, 50% R.H. and no ventilation. Data may vary depending on specific conditions at the building site

Performance**VOC Indoor Air Quality (IAQ) - Volatile organic compound emissions**

Conformity	EC 1 plus GEV-Emicode	GEV certified 17488/11.01.02
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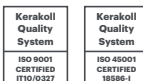
HIGH-TECH

Adhesion to concrete after 28 days	≥ 1,0 N/mm ²	EN 1015-12
Adhesion to masonry after 28 days	≥ 1,2 N/mm ²	EN 1015-12
Adhesion between finishing product and EPS	≥ 0.15 N/mm ² (EPS cohesive tear)	EAD 040083-00-0404
Adhesion between finishing product and MW	≥ 0.13 N/mm ² (MW cohesive tear)	EAD 040083-00-0404
Water capillary absorption	≤ 0,26 kg/m ²	EAD 040083-00-0404
Specific thermal capacity (c)	0,96 KJ/(kg·K)	ISO 11357-4
Thermal conductivity ($\lambda_{10, dry}$)	0,29 W/(m K)	EN 12664
Transversal deformation	≈ 11 mm	EN 12004
Modulus of elasticity under compression	1770 MPa	EN 13412
Reaction to fire	A2 - s1,d0	EN 13501-1
Compressive strength	≥ 6,0 N/mm ²	EN 1015-11
Flexural strength	≥ 3,5 N/mm ²	EN 1015-11
Resistance to the diffusion of water vapour	μ 16	EN 1015-19

Values taken at +23 °C, 50% 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
- use at temperatures between +5 °C and +30 °C
- only use water when mixing up the powder: do not use latex or other additives
- provide suitable mechanical hooks in compliance with current regulations
- do not lay on gypsum, metal or wood
- do not lay on damp substrates
- protect the coated surfaces from rain for at least 48 hours
- 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 January 2024 (ref. GBR Data Report – 01.24); 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.