Klima Light

Single-component, low-density, mineral adhesive&finishing product to lay and level finish insulating panels for ETICS use.

Low-density adhesive&finishing product for insulation, specifically intended for laying and finishing thermal insulation panelling systems on heat-insulating panels for ETICS use made of extruded polystyrene, expanded polystyrene and polystyrene foam for specific use in ETICS plinths, polyurethane, phenolic resin, cork, mineral and glass wool, wood fibre, aerogel on concrete, brick, cement-based plaster/ render, mineral and cement-based finishing products. White. Internal, external.

- 1. Excellent workability: superior fluidity finishing product, easy and light to spread
- 2. Extremely high coverage; up to 50% more in finishing compared to traditional adhesive&finishing products
- 3. Calibrated granulometry finishing; fine aesthetic finish compared to standard low-density products
- 4. High thicknesses can be applied; thixotropic, it does not drip nor shrink
- 5. Euroclass A1 reaction to fire, thanks to the low-density mineral inert material





Rating 5

- ✓ Regional Mineral ≥ 60%
- \checkmark Recycled Regional Mineral $\ge 30\%$
- \checkmark CO₂ Emission \leq 250 g/kg
- ✓ VOC Low Emission
- ✓ Recyclable
- 6. Can be applied using plastering machines
- Low thermal conductivity; it ensures the thermal performance continuity even at high thicknesses
- 8. Certificate of suitability adhesive and finishing product with ETICS use, Quality Mark No. 001/19 issued by ITC-CNR according to EAD 040083-00-0404

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Areas of application

→ Use

Bonding and finishing of panelling systems for:

- external insulation
- internal insulation

For internal and external use on heat sealed external insulating systems (ETICS) made of extruded polystyrene, expanded polystyrene and polystyrene foam for specific use in ETICS plinths, polyurethane, phenolic resin, cork, mineral and glass wool, wood fibre, aerogel on concrete, brick, cement-based plaster/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)".

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

The substrate must be perfectly even, solid (i.e. free of loose or easily removable debris), dimensionally stable, clean and dry. Substrates that are not compact must be treated in advance with Rasobuild Eco Consolidante stabilizing consolidant. Check that there are no traces of de-bonding agent on the concrete. Any uneven areas should be corrected in advance with products in the Geolite or Geocalce range. Do not apply on substrates when the temperature is above +30 °C.

 \rightarrow Preparation

Klima Light is prepared by mixing 20 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.

- \rightarrow Application (UNI / TR 11715 paragraph 9) As an adhesive: according to the irregularity of the substrate, Klima Light can be applied as an external rim with central spots or using a suitable toothed spreader to form a solid bed directly on the panel. The slabs must be pressed firmly onto the support so as to distribute the adhesive as evenly as possible and thus guarantee total adhesion of the slab itself. Laving and any adjustment of the panels must always be carried out when the adhesive is fresh and just laid: any movement or adjustment of the panels once drying has started may cause the adhesion to be poor or the panels to come loose. As a finishing product: when used as a finishing product on heat sealed panels, a first coat of Klima Light is applied in an even layer using a smooth spreader; a suitable mesh for ETICS use should then be sunk 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. On completion, the panels must be protected from rain for at least 48 hours. Klima Light can be applied by spraying using plastering machines.
- \rightarrow Cleaning

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

Special notes

When laying heat-insulating panels, always follow the indications provided by the manufacturer of the panels themselves. Laying on gypsum: on walls coated with gypsum, scagliola or ready-to-use gypsum-based plasters the substrate must be treated with Rasobuild Eco Consolidante before applying Klima Light.

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).

Abstract

Application and finishing of the thermal insulation panels, with insertion of alkali-resistant, glass fibre mesh for ETICS use by Kerakoll Spa between the two layers, is to be carried out on a substrate that is even, solid, clean and dry. The panels must first be bonded and then surface finished using low-density mineral single-component Klima Light, suitable for the laying and the finishing of all types of heat-insulating panels for ETICS use on absorbent substrates, such as Klima Light by Kerakoll Spa, specific for the creation of insulation panelling systems. Coverage will be $\approx 2 - 3.5$ kg/m² for bonding and ≈ 1 kg/m² for the finishing coat per mm of thickness.

Technical Data compliant with Kerakoll Quality Standard			
Appearance	White pre-mixed		
Apparent density of dry, hardened product	1,01 kg/dm ³	EN 1015-10	
Mineralogical nature of inert material	silicate - crystalline carbonate		
Nominal Grading	≈ 0 – 1200 µm	EN 1015-1	
Ash content at +450 °C	98.0%	EAD 040083-00-0404	
Ash content at +900 °C	67.0%	EAD 040083-00-0404	
Water retention	> 91%	EAD 040083-00-0404	
Shelf life	\approx 12 months from production in the original sealed packaging, protect from humidity		
Pack	20 kg bags		
Mixing water	≈ 5.8 l / 1 bag 20 kg		
Specific weight of the mixture	$\approx 1.2 \text{ kg/dm}^3$	EN 1015-6	
Pot life	≥ 5 hrs		
Temperature range for application	from +5 °C to +30 °C		
Maximum thickness obtainable as adhesive	≤ 20 mm		
Maximum thickness obtainable when used as a finishing product	\leq 15 mm (two coats with an inserted insulation panelling system mesh)		
Coverage:			
- as an adhesive	$\approx 2 - 3.5 \text{ kg/m}^2$		
- as a finishing coat	$\approx 1 \text{ kg/m}^2 \text{ per mm of thickness}$		

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

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Performance

VOC Indoor Air Quality (IAQ) - Volatile organic compound emissions			
HIGH-TECH			
Thermal conductivity $(\lambda_{10, dry})$	0.27 W/(m K)	EN 12664	
Specific thermal capacity (c)	0.74 kJ/(kg K)	ISO 11357-4	
Adhesion to concrete after 28 days	≥ 0,8 N/mm ²	EAD 040083-00-0404	
Adhesion between adhesive and EPS	$\ge 0.1 \text{ N/mm}^2$ (EPS cohesive tear)	EAD 040083-00-0404	
Compressive strength	≈ 4 MPa	EN 1015-11	
Resistance to the diffusion of water vapour	μ 11	EN 1015-19	
Flexural strength	≈ 2 MPa	EN 1015-11	
Reaction to fire	class A1	EN 13501-1	
Working temperature	from -15 °C to +80 °C		

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

Warning

- \rightarrow Product for professional use
- \rightarrow abide by any standards and national regulations
- \rightarrow use at temperatures between +5 °C and +30 °C
- \rightarrow only use water when mixing up the powder: do not use latex or other additives
- \rightarrow provide suitable mechanical hooks in compliance with current regulations
- \rightarrow do not use the adhesive to correct substrate irregularities
- \rightarrow do not move the panels once the adhesive has started to harden

- \rightarrow do not lay on gypsum, metal or wood
- \rightarrow do not lay on damp substrates
- → protect the coated surfaces from rain for at least 48 hours
- \rightarrow 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 2023 (ref. GBR Data Report – 02.23); 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.