Code: E951 2026/05 EN

Klima Airplus



front back

Sintered expanded graphite polystyrene technical heat-insulating panel, cut from block (EPS). Precise, square cut; cured; complies with standard EN 13163 and EAD 040083-00-0404 requirements. Product specified for the ETICS Klimaexpert ETA System with European Technical Approval. Free from CFC and HCFC it allows a reduction in CO_2 emissions, and can be recycled as an inert material at the end of its life.

Designed with stiffening ribs on the side to be bonded and stress relief joints on the side to be finished to effectively counteract thermal stresses and increase system stability over time.
Panel dimensions 1000 x 500 mm, available in thicknesses from 100 to 200 mm.

1. Improved thermal performance λ_D = 0.031 W/(m K)
2. The penetration of the Adhesive&finishing product into the dovetail-shaped rear ribs creates a technical stiffening structure to ensure immediate adhesion
3. Specially-sized stress relief joints to counteract stresses induced by differential heating and eliminate the “cushion” effect
4. Documentation availability CAM – Minimum Environmental Criteria
5. Suitable for Klimaexpert Fire Protection kits
6. Suitable for Klimaexpert High Performance EPS systems

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Areas of application

→ Intended use:
- Specific for Klimaexpert ETA external thermal insulation panelling systems with European Technical Approval - ETA - according to EAD 040083-00-0404.
- Suitable for external and internal thermal insulation panelling systems, use in cavities and for insulating floor slabs soffits.
- Suitable for Klimaexpert Fire Protection kits.
- Klimaexpert High Performance EPS with resistance to hail (class HIR 4) and resistance to collision (60 Joule)
- For use in new-builds or for the renovation of existing buildings, on brick, concrete, plaster/render substrates.

Do not use on dirty, non-cohesive, dusty, poorly anchored or uneven surfaces, in the presence of grease or water-repellent treatments.

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)
The substrate must be clean, dry, even, solid, dimensionally stable and free from loose or non-cohesive debris.
Substrates that are not compact must be treated in advance with Rasobuild Consolidante stabilizing consolidant.
Any uneven areas must be corrected in advance with products in the Geocalce or Geolite range.
Clean new concrete with a high pressure water jet.
Remove any paint or other coatings that do not adhere perfectly to the substrate or that are tempered by contact with water.
When mould, algae or fungi are present, clean the surfaces in advance with Skil Remove.

→ Preparation
The panel is ready-to-use.

→ Application
Use a Kerakoll Adhesive&finishing product to bond the panel. Apply on the back of the panel at the dove-tail ribs as an external rim and central strip, allowing the adhesive to penetrate into the ribs.





Special notes

→ Follow the instructions in the Kerakoll Technical documents when laying the insulating panels.
→ Pin the system with suitable mechanical insulation anchors 24 to 48 hours after bonding, and in any case after the adhesive&finishing product has set and hardened.
→ Do not apply the panels in direct contact with the ground or with horizontal surfaces in general.
→ Use suitable Starting Bases.
→ Do not use spot adhesion.
→ Do not apply on expansion joints or façade joints in general.
→ Store the panels in their original packaging, in a dry, well-ventilated place out of direct sunlight and protected against atmospheric agents. Do not store the panels for long periods of time, and always protect stored panels with opaque sheeting.
→ Lay the product at environmental and substrate temperatures from +5 °C to +30 °C.
→ Screen the scaffolding to avoid excessive heating of the substrate and of the panel during laying, and protect the materials from the weather during the setting and hardening phase.

Certificates and marks



Abstract

Thermal insulation will be provided using panels cut from blocks of expanded polystyrene with graphite, such as Klima Airplus, manufactured using high quality, cured raw materials guaranteed by companies with UNI EN ISO 9001 quality system certification. Panels must comply with standard EN13163, must be CE-marked and ETICS-compliant; they must meet the requirements of the European Assessment Document – EAD 040083-00-0404 for thermal insulation with panelling systems; they must have a reaction to fire class E according to standard EN 13501-1, with rated thermal conductivity λ_D equal to 0.031 W/(m K).

Technical Data compliant with Kerakoll Quality Standard	
Colour	Grey
Panel size	1000x500 mm

Performance		
HIGH-TECH		
Specific thermal capacity	Cp 1450 J/(kg K)	EN 10456
Working temperature range	+80 °C	
Performs to the requirements of EN 13163		
Declared thermal conductivity*	0.031 W/(m K)	EN 12667
Declared thermal resistance:		
- thickness 100 mm	3.20 m² K/W	EN 12667
- thickness 120 mm	3.85 m² K/W	EN 12667
- thickness 140 mm	4.50 m² K/W	EN 12667
- thickness 150 mm	4.80 m² K/W	EN 12667
- thickness 160 mm	5.15 m² K/W	EN 12667
- thickness 180 mm	5.80 m² K/W	EN 12667
- thickness 200 mm	6.45 m² K/W	EN 12667

Performance		
Tolerance for length	L2 = ± 2 mm	EN 822
Tolerance for width	W2 = ± 2 mm	EN 822
Tolerance for thickness	T1 = ± 1 mm	EN 823
Tolerance for squareness	S2 = ± 2/1000	EN 824
Tolerance for flatness	P3 = ± 3 mm	EN 825
Apparent volumetric mass	≈ 16 kg/m³	EN 1602
Dimensional stability under laboratory conditions	DS(N)2 = ± 0,2%	EN 1603
Reaction to fire	Class E	EN 13501-1
Resistance to the diffusion of vapour	μ = 20 – 30	EN 12086
Water absorption through total submersion	WL(T)3 ≤ 3%	EN 12087
Performance according to ETICS - EN 13499		
Limit water absorption through partial submersion	Wlp ≤ 0,5 kg/m²	EN 1609
Tensile strength perpendicular to surfaces	TR ≥ 100 kPa	EN 1607
Shear strength	Fτk ≥ 45 kPa	EN 12090
Shear modulus	Gm ≥ 1000 kPa	EN 12090

* Corrections to the λD value expressed in the CE marking are possible and not mandatory; they are provided for humidity and temperature conditions different from the standard ones defined by the relevant product standard EN 13163. If the set of conditions for the declared values can be considered representative for the actual application, these values can be used directly as project values, otherwise the data must be corrected using the procedures described in standard UNI EN ISO 10456.

Warning

→ Abide by any standards and national regulations
→ work at environmental and support temperatures from +5° to +30°C
→ provide suitable mechanical hooks in compliance with current regulations
→ do not lay on damp substrates
→ do not expose to direct UV light or heat sources
→ avoid using or coming into contact with aromatic solvent-based adhesives and/or products
→ the product is an item according to the definitions of the EC Regulation No. 1907/2006 and therefore does not require a Safety Data Sheet
→ for any other issues, contact Kerakoll Technical Customer Service: + 39 0536.811.516 www.kerakoll.com/contatti

Kerakoll Quality System ISO 9001 CERTIFIED IT10/0327
Kerakoll Quality System ISO 45001 CERTIFIED 18586-I

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