

THERMO-TEK PS PRO ALU



January 2024

with **ECOSE®** TECHNOLOGY



DESCRIPTION

Thermotek PS Pro ALU is a circular-wound rock mineral wool pipe section (pre-formed pipe DN up to 300 mm) **with premium thermal conductivity, excellent fire resistance** and minimum product tolerances of the inner and outer diameters thanks to the use of innovative production technologies.

The 1200 mm long pipe section **is slit on one side** for easier installation and **laminated with fibre glass reinforced, tear-resistant aluminium foil, which acts as a water vapour barrier and a self-adhesive seal to seal the longitudinal slit/joint.**

Due to the product's technical properties, installation of additional cladding on indoor pipes is not needed.

Knauf Insulation Thermo-teK PS Pro ALU is produced with **ECOSE® Technology**, a patented binder system, based entirely on renewable raw materials.

The thermal conductivity at 40 °C mean temperature is 0,035 W/(mK).

PERFORMANCE

Max. service temperature	500 °C (EN ISO 18096)
Service temperature ALU facing	≤ 80 °C
Reaction to fire	A2 ₁ -s1, d0 D0 ≤ 300 mm, A2-s1, d0 D0 > 300 mm (EN 13501-1)
Apparent density	ca. 100 kg/m ³ (EN ISO 18098)
Declaration of performance*	http://dopki.com/T4305NPCPR

* for detailed information on DoP please check the product label

APPLICATION

Defined Thermo-teK applications:

- Pipe insulation – heating, water supply
- Fire protection in wall/ceiling penetration

The product is recommended for thermal, fire and sound insulation of defined Thermo-teK applications within technical insulation where:

- **fire resistance up to EI 120 for wall/ceiling penetrations is required**
- **premium thermal conductivity is needed**
- **protection against water vapour and a clean environment is required**

BENEFITS

- ✓ Certified fire resistance up to EI 120 for wall/ceiling penetrations
- ✓ 2-in-1 solution – optimal thermal & fire performance
- ✓ Premium thermal conductivity
- ✓ Longitudinal self-adhesive closure
- ✓ Fastest way of insulating pipes (pre-formed pipe sections, facing/finishing layer already applied on the product / no glue needed / no cladding needed for indoor applications)
- ✓ Minimum tolerances of thicknesses and diameters
- ✓ Nice visual appearance of the insulation (ALU facing)
- ✓ ECOSE® Technology



STANDARDS

Knauf Insulation products are produced according to four of the most important International Management Standards for sustainability ISO 9001 (Quality Management), ISO 14001 (Environmental Management), ISO 50001 (Energy Management) and ISO 45001 (Health and Safety Management), all certified by Tüv Nord.

CERTIFICATES



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SPECIFICATIONS

Description	Sign	Description/data						Unit	Standard
Thermal conductivity depending on temperature	ϑ	10	50	100	150	200	250	°C	EN ISO 8497
	λ	0,033	0,037	0,044	0,052	0,062	0,073	W/(mK)	
Water soluble chloride ions (AS quality)	-	≤ 10						ppm	EN ISO 12624
Water absorption	W_p	≤ 1						kg/m ²	EN ISO 12623
Water vapour diffusion equivalent air layer thickness ALU	S_d	≥ 200						m	EN ISO 12629
Silicone free	-	No emissions of lacquering disturbing substances						-	-
Melting point of fibres	ϑ	≥ 1000						°C	DIN 4102-17
Specific heat capacity	c_p	1030						J/(kgK)	EN ISO 10456
Designation code	-	MW-EN14303-T8-ST(+)-S00-WS1-MV2-CL10 (OD < 150 mm) MW-EN14303-T9-ST(+)-S00-WS1-MV2-CL10 (OD \geq 150 mm)						-	EN 14303

Declared material properties are obtained in the production process and ensured by the factory production control in accordance with the European Standard at the time of manufacture. Observing storage and handling guidelines will maintain performance within published tolerances.

HANDLING

Knauf Insulation products are easy to handle and easy to install. They are supplied in suitable packaging materials to balance necessary transport protection with sustainable recycling options. Packaging is not designed for long-term storage or exposure to harsh weather conditions. Further product information is mentioned on every pack.

STORAGE

For longer-term protection on site we recommend storing the product either indoors or alternatively under a roof cover and off the ground. If covered storage is not available, products can be stored outside (open-air-storage) if placed off the ground (keep palletized) and covered with plastic hood (foil), for a maximum of up to 6 months from the date of delivery. Outdoor storage is not recommended during particularly humid months with large fluctuations in temperature.

STANDARD FORMATS*

Thickness	20 -160 mm
Internal diameter	15 - 324 mm
Length	1200 mm

*Other dimensions on request.



Knauf Insulation mineral wool products made with ECOSE® Technology benefit from a formaldehyde-free binder made from rapidly renewable bio-based materials instead of petroleum-based chemicals. The technology has been developed for Knauf Insulation's mineral wool products, enhancing their environmental credentials without affecting the thermal, acoustic or fire performance. Insulation products made with ECOSE® Technology contain no dye or artificial colours – the colour is completely natural.

Knauf Insulation d.o.o.

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