

THERMO-TEK LM CLD ALS



October 2023



with **ECOSE®**
TECHNOLOGY

DESCRIPTION

Thermo-teK LM ClD ALS is a rock mineral wool mat, consisting of individual mineral wool strips (lamellas) that are bonded on one side to an **extra tough and water vapour tight alulamination with glass scrim reinforcing**.

The lamella mat is flexible and robust and can be perfectly adapted for installations such as valves, pumps, flanges.

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

PERFORMANCE

Max. service temperature	250 °C (EN ISO 18097)
Service temperature ALU facing	≤ 80 °C
Reaction to fire	A1 (EN 13501-1)
Apparent density	ca. 40 kg/m ³ (EN ISO 29470)

APPLICATION

- **Pipe lines.**
- **Rectangular and circular air ducts – cooling / air conditioning and heating, external insulation**

The product is recommended for thermal insulation of steel, stainless steel, copper and plastic pipes in building services systems: warm/hot water lines, lines for chilled water and pipework with alternating temperatures:

- **Drinking water pipes**
- **Cooling water pipes**
- **Alternating temperature systems**
- **Drainage lines (rain and snow)**

BENEFITS

- ✓ Non combustible Rock Mineral Wool A1
- ✓ Extra tough and water vapour tight alu-facing with glass scrim reinforcing and therefore highly protective regarding possible damage
- ✓ Application range from 0 °C to + 250 °C
- ✓ Simple and fast processing
- ✓ Time and cost savings
- ✓ Space savings
- ✓ Low embedded CO₂
- ✓ 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	40	50	100	150	200	250	°C	EN 12667
	λ	0,042	0,044	0,054	0,067	0,083	0,104	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	≥ 1500						m	EN 12086
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-T4-ST(+)-250-WS1-MV2-CL10						-	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	30, 40, 50 mm
Width	500/1000 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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