

THERMO-TEK FM 040 - 060 ALU



January 2023

with **ECOSE®**
TECHNOLOGY



DESCRIPTION

Thermo-teK FM 040 – 060 ALU is an exceptionally **durable and resistant** Rock Mineral Wool roll with a fibre glass reinforced, tear resistant aluminium lamination on one side, which acts as a water vapour barrier and additional reinforcement. As a universal solution for lining or multi-layer insulations, depending on the density, it is available for use at temperatures up to 250 °C.

Knauf Insulation Thermo-teK FM 040 – 060 ALU is produced with **ECOSE® Technology**, a patented binder system, based entirely on renewable raw materials.

PERFORMANCE

Service temperature aluminium facing	≤ 80 °C
Reaction to fire	A1 (EN 13501-1)
Apparent density	ca. 40-50-60 kg/m ³ (EN ISO 29470)
Declaration of performance*	http://dopki.com/R4305JPCPR for FM 040 ALU http://dopki.com/R4305LPCPR for FM 050 ALU, 060 ALU

* for detailed information on DoP please check the product label

APPLICATION

Defined Thermo-teK applications:

- Rectangular air ducts – outside insulation
- Circular air ducts – outside insulation
- Ducts in technical & acoustic rooms

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

- higher mechanical resistance of the material is needed
- a better visual appearance after installation is required
- a water vapour barrier is required.

BENEFITS

- ✓ Tear-resistant, sturdy aluminium lamination
- ✓ Optimal visual appearance after installation
- ✓ High mechanical resistance
- ✓ Flexible and dimensionally stable solution
- ✓ 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
	θ			10	°C	
Thermal conductivity depending on temperature	λ	FM 040 ALU		0,037	W/(mK)	EN 12667
		FM 050 ALU		0,035		
		FM 060 ALU		0,035		
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 resistance	μ	1			-	EN 14303
Longitudinal air flow resistance	r	FM 040	FM 050	FM 060	kPa*s/m ²	EN 29053
		≥ 5	≥ 10	≥ 15		
Silicone free	-	No emissions by 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	-	FM 040 ALU - MW-EN 13162-T2-WS-AF5 FM 050 ALU - MW-EN 13162-T2-WS-AF10 FM 060 ALU - MW-EN 13162-T2-WS-AF15			-	EN 13162

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 - 120 mm
Width	500 / 1000 mm
Length	2000 - 6000 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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