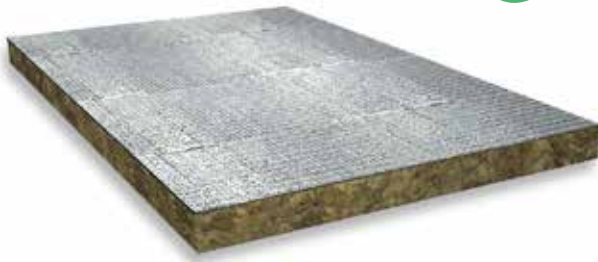


# THERMO-TEK BD 035 - 100 ALU



September 2023

with **ECOSE®**  
TECHNOLOGY



## DESCRIPTION

Thermo-teK BD 035 – 100 ALU is a Rock Mineral Wool insulation board, bonded **on one side to a tear-resistant, glass mesh reinforced aluminium foil that acts as a water vapour barrier and ensures a closed-fibre environment (improved dust protection in the room and during installation).**

Knauf Insulation Thermo-teK BD 035 – 100 ALU is produced with **ECOSE® Technology**, a patented binder system, based entirely on renewable raw materials. The insulation board has received the „Eurofins Indoor Air Comfort Gold“ award in recognition of the ECOSE® Technology binder used in their manufacturing process. Its use ensures a better room atmosphere while also making handling considerably more comfortable.

## PERFORMANCE

Max. service temperature	250 °C (EN ISO 18097)
Service temperature aluminium facing	≤ 80 °C
Reaction to fire	A1 (EN 13501-1)
Apparent density	ca. 35 to 100 kg/m <sup>3</sup> (EN ISO 29470)
Declaration of performance*	
BD 035 ALU	www.dopki.com/T4305AP
BD 040 ALU	www.dopki.com/T4305AR
BD 050/060 ALU	www.dopki.com/T4305LP
BD 070/080 ALU	www.dopki.com/T4305OP
BD 090/100 ALU	www.dopki.com/R4305LP

\* for detailed information on DoP please check the product label

## APPLICATION

Defined Thermo-teK applications:

- Rectangular air ducts – outside insulation
- Technical & acoustic rooms

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

- a metal finishing layer is required to assure closed-fibre environment (protection against dust during installation).
- a water vapour barrier is required.

## BENEFITS

- ✓ Tear-resistant, sturdy aluminium lamination
- ✓ Rigid, flat and stable form
- ✓ Protection against dust
- ✓ Protection against water vapour
- ✓ Nice visual appearance with sharp edges
- ✓ Possibility to have customised dimensions
- ✓ Optimal thermal, acoustic and mechanical performance for a broad range of applications
- ✓ 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



Valid only for BD 60 and BD 80: EPD®

# THERMO-TEK BD 035 - 100 ALU



September 2023

## SPECIFICATIONS

Description	Sign	Description/data									Unit	Standard
		TT	Density (kg/m <sup>3</sup> )	10	40	50	100	150	200	250		
Thermal conductivity depending on temperature	λ	BD 035	ca. 35	0,038	0,044	0,046	0,059	0,075	0,096	0,123	W/(mK)	EN 12667
		BD 040	ca. 40	0,037	0,040	0,042	0,052	0,065	0,081	0,100		
		BD 050	ca. 50	0,035	0,039	0,041	0,048	0,058	0,071	0,088		
		BD 060	ca. 60	0,035	0,039	0,041	0,048	0,058	0,071	0,088		
		BD 070	ca. 70	0,034	0,038	0,039	0,046	0,056	0,065	0,077		
		BD 080	ca. 80	0,034	0,038	0,039	0,046	0,056	0,065	0,077		
		BD 090	ca. 90	0,035	0,038	-	-	-	-	-		
		BD 100	ca. 100	0,035	0,038	-	-	-	-	-		
Water soluble chloride ions (AS quality)	-	≤ 10									ppm	EN ISO 12624
Water absorption	W <sub>p</sub>	≤ 1,0									kg/m <sup>2</sup>	EN ISO 29767
Water vapour diffusion resistance	μ	1									-	EN 14303 / EN 13162
Water vapour diffusion equivalent air layer thickness ALU		S <sub>d</sub>	≥ 200									m
Silicone free	-	No emissions of lacquering disturbing substances									-	-
Melting point of fibres	ϑ	≥ 1000									°C	DIN 4102-17
Specific heat capacity	c <sub>p</sub>	1030									J/(kgK)	EN ISO 10456
Designation code	-	BD 035-080 - MW-EN14303-TS-ST(+250-WS1SCL10 BD 090,100 - MW-EN13162-TS-WS-AF25									-	EN 14303 / 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	55 - 250 mm (BD 035)
	45 - 250 mm (BD 040)
	40 - 250 mm (BD 050)
	30 - 250 mm (BD 060, BD 070)
	25 - 250 mm (BD 080-100)
Width	600 mm
Length	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.**

Varaždinska 140, 42220 Novi Marof, Croatia | E-mail: [ts@knaufinsulation.com](mailto:ts@knaufinsulation.com)

All rights reserved, including those of photomechanical reproduction and storage in electronic media. Commercial use of the processes and work presented in this document is not permitted. Extreme caution was taken in assembling the information, texts and illustrations in this document. Nevertheless, errors cannot be entirely ruled out. The publisher and editors assume no legal responsibility or any liability whatsoever for any incorrect information or any consequences thereof. The publisher and editors are grateful for any suggestions for improvement as well as the identification of any errors.

