



Knauf Data Sheet

OM-DS-10e 08-09

KB Blanket Insulation

with ECOSE® Technology



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Description

Knauf KB Blanket Insulation is a lightweight blanket of glass fibers bonded with ECOSE Technology. The products listed are manufactured single layer. However, some items with 24" and 48" widths can also be manufactured double layer. KB Blanket is used as thermal and/or acoustical insulation for appliance, equipment, acoustical, industrial, commercial and marine applications up to 650°F (343°C).

ECOSE Technology

ECOSE Technology is a revolutionary new binder chemistry that makes Knauf Insulation products even more sustainable than ever. It is based on rapidly renewable bio-based materials rather than non-renewable petroleum-based chemicals traditionally used in fiber glass insulation products. ECOSE Technology reduces binder embodied energy and does not contain phenol, formaldehyde, acrylics or artificial colors.

Features and Benefits

Sustainability

- Carbon-negative - meaning: Knauf insulation products used for thermal insulating purposes recover the energy that it took to make them in just hours or a few days, depending on the application. Once installed, the product continues to save energy and reduce carbon generation as long as it is in place.

- Fiber glass insulation with ECOSE Technology contains three primary ingredients:
 - Sand, one of the world's most abundant and renewable resources
 - Post-consumer recycled bottle glass
 - ECOSE Technology which reduces binder embodied energy by up to 70%

Indoor Air Quality

- Certified for indoor air quality as a low emitting product by The GREENGUARD Environmental Institute to both the GREENGUARD Certification ProgramSM and the more stringent GREENGUARD Children and SchoolsSM standard.

Specification Compliance

- ASTM C 553; Types I, II and III
- ASTM C 795
- HH-I-558C; Form C, Type I, Class 6 and 7 (Class 8 with upper temperature limitation of 650°F)
- USCG 164.109/21/0
- GREENGUARD Environmental Institute

Technical Data

Surface Burning Characteristics (UL Classified)

- When tested in accordance with ASTM E 84, UL 723, Knauf KB Blanket Insulation does not exceed 25 Flame Spread, 50 Smoke Developed.

Maximum Service Temperature (ASTM C 411)

- Knauf KB Blanket Insulation is designed for applications to a maximum operating temperature of 650°F (343°C).

Odor (ASTM C 665)

- Not objectionable.

Resistance to Microbial Growth (ASTM C 1338)

- No growth.

Water Vapor Sorption (ASTM C 1104)

- Less than 3% by weight.

Corrosiveness (ASTM C 665)

- Does not accelerate corrosion on steel, copper or aluminum.

Corrosion (ASTM C 1617)

- The corrosion rate in mils/yr will not exceed that of the 1 ppm chloride solution.

Availability

KB Blanket Insulation is made-to-order and is available in rolls. For your requirements not listed, contact your Knauf Insulation sales representative.

Packaging

KB Blanket Insulation is placed in a poly bag, vacuum packaged, and slipped into a poly sleeve. The end of the tube is closed with a plastic tie.

Fiber Glass and Mold

Fiber glass insulation will not sustain mold growth. However, mold can grow on almost any material when it becomes wet and contaminated. Carefully inspect any insulation that has been exposed to water. If it shows any sign of mold it must be discarded. If the material is wet but shows no evidence of mold, it should be dried rapidly and thoroughly. If it shows signs of facing degradation from wetting, it should be replaced. Air handling insulation used in the air stream must be discarded if exposed to water.



Sound Absorption Coefficients
(ASTM C 423, Type A Mounting)

Density	Thickness	NRC
.75 PCF (12 kg/m ³)	1½" (38 mm)	0.70
1.0 PCF (16 kg/m ³)	1" (25 mm)	0.65
2.0 PCF (32 kg/m ³)	¾" (19 mm)	0.65
2.5 PCF (40 kg/m ³)	½" (13 mm)	0.60

Thermal Conductivity
(ASTM C 518) @ 75°F Mean Temperature

Density	Thermal Conductivity (BTU-in. ft ² °F)
.75 PCF (12 kg/m ³)	0.30
1.0 PCF (16 kg/m ³)	0.28
1.5 PCF (24 kg/m ³)	0.26
2.0 PCF (32 kg/m ³)	0.24
2.5 PCF (40 kg/m ³)	0.23

Forms Available

Density	Thickness	Width	Length ¹
0.75 PCF (12 kg/m ³)	1½" (38 mm)	24"-36" (610 mm-914 mm) 48"-72" (1219 mm-1829 mm)	150' (46.08 m)
	2" (51 mm)		100' (30.48 m)
1.0 PCF (16 kg/m ³)	1" (25 mm)		150' (46.08 m)
	1½" (38 mm)		100' (30.48 m)
1.5 PCF (24 kg/m ³)	2" (51 mm)		75' (22.86 m)
	¾" (19 mm)		150' (46.08 m)
	1" (25 mm)		100' (30.48 m)
2.0 PCF (32 kg/m ³)	1½" (38 mm)		75' (22.86 m)
	½" (13 mm)		150' (46.08 m)
2.5 PCF (40 kg/m ³)	¾" (19 mm)		100' (30.48 m)
	1" (25 mm)	75' (22.86 m)	
2.5 PCF (40 kg/m ³)	½" (13 mm)	125' (38.10 m)	

¹Lengths made to your specification are also available.

For more information call (800) 825-4434, ext. 8283

or visit us online at www.knaufinsulation.us

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Notes

The chemical and physical properties of Knauf KB Blanket Insulation represent typical average values determined in accordance with accepted test methods. The data is subject to normal variations. The data is supplied as a technical service and is subject to change without notice. References to numerical flame spread rating are not intended to reflect hazards presented by these, or any other material under actual fire conditions.

Check with your Knauf Insulation sales representative to assure information is current.



LEED Eligible Product

Use of this product may help building projects meet green building standards as set by the Leadership in Energy and Environmental Design (LEED) Green Building Rating System. Credit 4.1 - 4.2 Recycled Content
Credit 5.1 - 5.2 Regional Materials



Knauf KB Blanket with ECOSE Technology products are certified for indoor air quality as a low emitting product by The GREENGUARD Environmental Institute to both the GREENGUARD Certification ProgramSM and the more stringent GREENGUARD Children and SchoolsSM standard. www.greenguard.org. The GREENGUARD INDOOR AIR QUALITY CERTIFIED Mark is a registered certification mark used under license through the GREENGUARD Environmental Institute.

