DATA SHEET

KN Series

with ECOSE® Technology

DESCRIPTION

KN Series products are flexible to semi-rigid blankets made from inorganic glass fibers bonded with ECOSE Technology.

APPLICATIONS

- Thermal and/or acoustical insulation in the appliance, equipment, industrial, commercial, transportation and marine markets up to 650° F (343° C)

SPECIFICATION COMPLIANCE

- ASTM C553; Type I, Type II
- MIL-DTL-32585; Type 1, Form 2, Facing A
- UL/ULC Classified

INDOOR AIR QUALITY

- UL Environment
  - GREENGUARD Certified
  - GREENGUARD Gold Certified
  - Validated to be Formaldehyde-Free
- EUCEB Certified

PACKAGING

- Placed in a poly bag and then stretch wrapped into units of 4 or 6 rolls.

CONTRACTOR: _____

JOB: _____

DATE: _____

DOING MORE FOR THE WORLD WE LIVE IN.

Knauf Insulation products with ECOSE® Technology are made using our patented, bio-based binder - a smarter alternative to the phenol/formaldehyde (PF) binder traditionally used in fiberglass products. The bio-based binder holds our product together, gives the product its unique appearance and makes it formaldehyde-free.

All of our products are made from sustainable resources, such as recycled glass and sand. And we're proud to be putting glass bottles back to work rather than into landfills. Our products are made with a minimum of 50% recycled glass—totaling an average of 26 million bottles each month.

TECHNICAL DATA		
Property (Unit)	**Test**	**Performance**
Corrosiveness	ASTM C665	Does not accelerate corrosion of steel
Corrosion	ASTM C1617	Pass
Odor Emission	ASTM C1304	Pass
Water Vapor Sorption (by weight)	ASTM C1104	Less than 3%
Maximum Service Temperature	ASTM C411	650° F (343° C)
Mold Growth	ASTM C1338	Pass
Surface Burning Characteristics (flame spread/smoke developed)	ASTM E84, UL 723	UL Classified FHC 25/50

FORMS AVAILABLE					
Type	**Thickness**	**Width**	**Length**	**Layer**	**Current Minimum (ft²)**
KN-75	1½" (38 mm)	16" – 48" (406 – 1,219 mm) 60" – 96" (1,829 – 2,438 mm)	80' (24.38 m)	Double	134,000
	2" (51 mm)		115' (35.08 m)	Single	92,000
	2½" (64 mm)		95' (28.96 m)	Single	80,000
	3" (76 mm)		75' (22.86 m)	Single	68,000
	4" (102 mm)		40' (12.19 m)	Single	50,000
	5" (127 mm)		40' (12.19 m)	Single	41,000
	6" (152 mm)		35' (10.67 m)	Single	34,000
KN-100	1" (25 mm)		95' (28.96 m)	Double	150,000
	1½" (38 mm)		125' (38.10 m)	Single	100,000
	2" (51 mm)		95' (28.96 m)	Single	75,000
	2½" (64 mm)		75' (22.86 m)	Single	60,000
	3" (76 mm)		60' (18.29 m)	Single	50,000
	4" (102 mm)		45' (13.72 m)	Single	39,000
	5" (127 mm)		35' (10.67 m)	Single	31,000
	6" (152 mm)		30' (9.14 m)	Single	25,000
KN-150	1" (25 mm)		125' (38.10 m)	Single	100,000
	1½" (38 mm)		85' (25.91 m)	Single	68,000
	2" (51 mm)		60' (18.29 m)	Single	50,000
KN-200	1" (25 mm)		95' (28.96 m)	Single	75,000
	1½" (38 mm)		60' (18.29 m)	Single	50,000
	2" (51 mm)		45' (13.72 m)	Single	39,000
KN-250	1" (25 mm)		75' (22.86 m)	Single	60,000
	1½" (38 mm)		50' (15.24 m)	Single	42,000

KN Series Insulation is made-to-order and is available in rolls. For requirements not listed, contact your Knauf Insulation Territory Manager.

SOUND ABSORPTION COEFFICIENTS I ASTM C423, TYPE A MOUNTING								
Density	**Thickness**	**Octave Band Center Frequency (cycles/sec.)**						
		125	**250**	**500**	**1000**	**2000**	**4000**	**NRC**
0.75 PCF (12 kg/m³)	1½" (38 mm)	0.20	0.42	0.82	0.87	0.94	0.91	0.75
1.0 PCF (16 kg/m³)	1" (25 mm)	0.17	0.24	0.62	0.79	0.88	0.96	0.65
	1½" (38 mm)	0.31	0.50	0.89	0.98	1.01	1.01	0.85
1.5 PCF (24 kg/m³)	1" (25 mm)	0.03	0.28	0.56	0.82	0.90	0.94	0.65
	1½" (38 mm)	0.21	0.51	0.97	1.08	1.07	1.06	0.90
	2" (51 mm)	0.38	0.89	1.08	1.14	1.11	1.08	1.05
2.0 PCF (32 kg/m³)	1" (25 mm)	0.06	0.29	0.67	0.86	0.94	0.95	0.70
	1½" (38 mm)	0.26	0.57	0.97	1.06	1.06	1.04	0.90
	2" (51 mm)	0.22	0.78	1.19	1.08	1.11	1.06	1.05

THERMAL CONDUCTIVITY I ASTM C518 @ 75° F MEAN TEMPERATURE	
Density	**k**
0.75 PCF (12 kg/m³)	0.30
1.0 PCF (16 kg/m³)	0.26
1.50 PCF (24 kg/m³)	0.24
2.0 PCF (32 kg/m³)	0.23
2.50 PCF (40 kg/m³)	0.22

FIBERGLASS AND MOLD

Fiberglass 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.

CERTIFICATIONS

Check with your Knauf Insulation Territory Manager to ensure information is current.

The chemical and physical properties of this product represent average values determined in accordance with accepted test methods. The data is subject to normal manufacturing variations. The data is supplied as a technical service and is subject to change without notice. References to numerical flame spread ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

This product is covered by one or more U.S. and/or other patents.
See patent www.knaufnorthamerica.com/patents

Visit **knaufnorthamerica.com** to learn more.

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