KNAUF INSULATION

Data Sheet | OEM-KFR-DS 9-16

KFR Self-Cleaning Range Insulation

with ECOSE® Technology

with ECOSE® TECHNOLOGY

KFR Self-Cleaning Range Insulation *with ECOSE® Technology*

Description

Knauf Insulation KFR Self-Cleaning Range Insulation is a natural brown color glass mineral wool blanket insulating material. KFR Insulation is designed to meet the design needs of range manufacturers. It is low smoke and odor alternative with a maximum service temperature of 1000°F.

ECOSE® Technology

ECOSE Technology is a revolutionary binder chemistry that enhances the sustainability of our products. The "binder" is the bond that holds our glass mineral wool product together and gives the product its shape and brown color. ECOSE Technology is a plant-based, sustainable chemistry that replaces the phenol/formaldehyde (PF) binder traditionally used in glass mineral wool products. Products using ECOSE Technology are formaldehyde-free and have reduced global warming potential when compared to our products of the past.

Sustainability

Knauf Insulation's products used for thermal insulating purposes recover the energy that it took to make them in just hours or days, depending on the application. Once installed, the product continues to save energy and reduce carbon generation as long as it is in place.

Glass mineral wool insulation with ECOSE Technology contains three key ingredients:

- Recycled glass content, verified every 6 months by UL Environment
- Sand, one of the world's most abundant resources
- Our green chemistry initiative ECOSE Technology, which is validated to be formaldehyde-free

Features and Benefits

- Low thermal conductivity
- Very low noxious/toxic gas release during heat up
- Fire-resistant, non-corrosive, tough and resilient
- Excellent acoustic insulating properties

Technical Data

Surface Burning Characteristics

- UL/ULC Classified.
- Does not exceed 25 Flame Spread, 50 Smoke Developed when tested in accordance with ASTM E84, and UL 723.

Maximum Service Temperature (ASTM C411)

- Knauf Insulation KFR Self-Cleaning Range Insulation is designed for applications to a maximum operating temperature of 1000°F.

Corrosiveness (ASTM C665)

- Will not accelerate corrosion of steel

Odor (ASTM C1304)

- Not objectionable

Mold Growth (ASTM C1338)

- Does not support or sustain growth

Water Vapor Sorption (ASTM C1104)

- Less than 3% by weight

Glass Mineral Wool and Mold

Glass mineral wool 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.

Notes

The chemical physical properties of KFR Self-Cleaning Range Insulation represent typical average values determined in accordance with accepted test methods. The data is subject to normal manufacturing and testing 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.

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

Thermal Conductivity (ASTM C177)

Density	Mean Temperature		
	75°F	300°F	500°F
1.10 PCF (16 kg/m³)	0.26	0.50	0.90
1.75 PCF (28 kg/m³)	0.24	0.38	0.60
2.50 PCF (40 kg/m³)	0.22	0.37	0.57
3.70 PCF (59.3 kg/m³)	0.22	0.34	0.48

Forms Available

Density (lbs/ft³)	Thickness	Width	Length	Layer	Current Minimum (ft²)
1.10	1" (25 mm)	36"–48", 60"–96" (914–1219 mm, 1829–2438 mm)	95' (28.96 m)	Double	124,000
	1½" (38 mm)		125' (38.1 m)	Single	83,000
	2" (51 mm)		95' (28.96 m)	Single	62,000
	3" (76 mm)		65' (19.81 m)	Single	42,000
1.25	1" (25 mm)	36"–48", 60"–96" (914–1219 mm, 1829–2438 mm)	85' (25.91 m)	Double	110,000
	1½" (38 mm)		100' (30.48 m)	Single	74,000
	2" (51 mm)		85' (25.91 m)	Single	55,000
	3" (76 mm)		55' (16.76 m)	Single	37,000
	4" (102 mm)		40' (12.19 m)	Single	27,000
1.75	1" (25 mm)	36"–48", 60"–96" (914–1219 mm, 1829–2438 mm)	110' (33.53 m)	Single	78,000
	1½" (38 mm)		75' (22.86 m)	Single	52,000
	1¾" (44 mm)		65' (19.81 m)	Single	45,000
	2" (51 mm)		55' (16.76 m)	Single	39,000
	2½" (64 mm)		45' (13.72 m)	Single	31,000
	3" (76 mm)		40' (12.19 m)	Single	26,000
2.50	1" (25 mm)	36"–48", 60"–96" (914–1219 mm, 1829–2438 mm)	85' (25.91 m)	Single	55,000
	1¼" (32 mm)		60' (18.29 m)	Single	44,000
	1½" (38 mm)		55' (16.76 m)	Single	37,000
	2" (51 mm)		40' (12.19 m)	Single	28,000
3.70	¾" (19 mm)	36"–48", 60"–96" (914–1219 mm, 1829–2438 mm)	70' (21.34 m)	Single	49,000
	1" (25 mm)		60' (18.29 m)	Single	37,000
	1¼" (32 mm)		50' (15.24 m)	Single	30,000
	1½" (38 mm)		40' (12.19 m)	Single	25,000

KNAUF INSULATION

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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.

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