

# Acoustical Insulation

with *ECOSE® Technology*



### WALL AND CEILING LINER M

#### Description

Wall and Ceiling Liner M with ECOSE Technology is a brown flexible fiberglass blanket with a black mat facing adhered to one surface. It provides thermal and acoustical insulation while a smooth, tough surface resists damage during installation. It is intended to be mechanically fastened to walls and can be left exposed, covered with fabric or suspended above linear metal and metal pan ceiling systems to serve as both a visual and acoustical treatment.

#### Application

- Acoustical and visual barrier for walls and ceilings where a black surface is required
- Theaters, sound studios, public concourses and other areas where acoustical treatment is needed

### BLACK ACOUSTICAL BOARD

#### Description

Black Acoustical Board with ECOSE Technology is a heavy density fiberglass board insulation. The base board is brown with a black mat applied to provide a smooth tough finish and a visual barrier with an aesthetic appearance.

#### Application

- Acoustical and visual barrier on walls and ceilings
- Typically used where framing members are not present

### INSULATION BOARD

#### Description

Insulation Board with ECOSE Technology is a thermal and acoustical insulation product made from inorganic glass fibers preformed into boards. The board is available plain, with a factory applied foil-scrim-kraft (FSK) facing or all service jacket (ASJ+).

#### Application

- Metal and masonry walls
- Wall and roof panel systems
- Curtain wall assemblies
- Cavity walls

### INDOOR AIR QUALITY

- UL Environment
  - GREENGUARD Certified
  - GREENGUARD Gold Certified

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.

with **ECOSE**  
TECHNOLOGY



### 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. If it shows signs of facing degradation from wetting, it should be replaced.

TECHNICAL DATA		
Property (Unit)	Test	Performance
Corrosiveness	ASTM C665	Does not accelerate corrosion on steel
Corrosion	ASTM C1617	Pass
Surface Burning Characteristics (flame spread/smoke developed)	ASTM E84, UL 723, NFPA 90A and 90B (IB), CAN/ULC S102 (IB)	25/50

WALL AND CEILING LINER SOUND ABSORPTION COEFFICIENTS   ASTM C423, TYPE A MOUNTING								
Type		Octave Band Center Frequency (cycles/sec.)						
		125	250	500	1000	2000	4000	NRC
1.5 PCF (24 kg/m <sup>3</sup> )	1" (25 mm)	0.18	0.28	0.73	0.85	0.91	0.90	0.70
	1.5" (38 mm)	0.23	0.50	0.87	0.92	0.93	0.93	0.80
	2" (51 mm)	0.37	0.76	1.02	1.00	0.98	0.92	0.95
2.0 PCF (32 kg/m <sup>3</sup> )	0.5" (13 mm)	0.10	0.17	0.43	0.59	0.73	0.75	0.50
	1" (25 mm)	0.25	0.35	0.69	0.89	0.96	1.01	0.70
	1.5" (38 mm)	0.27	0.55	0.87	0.99	1.00	0.98	0.85

Available in 48" (1,219 mm) wide rolls in lengths of 100' or 50' (30.48 or 15.24 m).

BLACK ACOUSTICAL BOARD SOUND ABSORPTION COEFFICIENTS   ASTM C423, TYPE A MOUNTING								
		Octave Band Center Frequency (cycles/sec.)						
		125	250	500	1000	2000	4000	NRC
Density	Thickness							
2.25 PCF (36 kg/m <sup>3</sup> )	2" (51mm)	0.26	0.62	1.05	1.07	1.04	1.05	0.95
3.0 PCF (48 kg/m <sup>3</sup> )	1" (25 mm)	0.13	0.24	0.56	0.83	0.92	0.98	0.65
	1½" (38 mm)	0.19	0.41	0.89	1.02	1.03	1.04	0.85
	2" (51 mm)	0.33	.67	1.07	1.07	1.03	1.06	0.95

Available 24" (610 mm) wide x 48" (1,219 mm) long.

**INSULATION BOARD SOUND ABSORPTION COEFFICIENTS | ASTM C423, E795, TYPE A MOUNTING**

			Octave Band Center Frequency (cycles/sec.)						
Type	Facing	Thickness	125	250	500	1000	2000	4000	NRC
2.25 PCF (36 kg/m <sup>3</sup> )	FSK	1" (25 mm)	0.05	0.24	0.59	0.86	0.97	1.00	0.65
		1½" (38 mm)	0.17	0.49	0.93	1.03	1.03	0.99	0.85
		2" (51 mm)	0.26	0.62	1.05	1.07	1.04	1.05	0.95
3.0 PCF (48 kg/m <sup>3</sup> )	Plain	1" (25 mm)	0.08	0.23	0.62	0.88	0.96	0.99	0.65
		1½" (38 mm)	0.09	0.39	0.89	1.03	1.06	1.01	0.85
		2" (51 mm)	0.29	0.65	1.11	1.13	1.06	1.03	1.00
		3" (76 mm)	0.54	1.01	1.18	1.07	1.07	1.04	1.10
	FSK	4" (102 mm)	0.95	1.11	1.17	1.07	1.07	1.06	1.10
		1" (25 mm)	0.21	0.63	0.84	0.93	0.51	0.22	0.75
		1½" (38 mm)	0.45	0.60	0.99	0.73	0.53	0.27	0.70
		2" (51 mm)	0.67	0.77	0.93	0.74	0.47	0.28	0.75

Available in widths of 24" (610 mm) and 48" (1,219 mm) and lengths of 36" (915 mm) to 120" (3,048 mm).

**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](http://www.knaufnorthamerica.com/patents)

Visit [knaufnorthamerica.com](http://knaufnorthamerica.com) to learn more.

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01-21

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