DATA SHEET

Black Acoustical Board

with ECOSE® Technology

DESCRIPTION

Black Acoustical Board is a heavy-density mat-faced fiberglass board insulation bonded with ECOSE Technology. Its base board is brown with a black mat facing with a smooth, tough surface, that resists damage during installation and operation.

APPLICATION

- Acoustical insulation and/or a visual barrier on walls and ceilings, where system design requires a rigid product where additional strength and abuse resistance are required
- Typically used where framing members are not present

INDOOR AIR QUALITY

- UL Environment
  - GREENGUARD Certified
  - GREENGUARD Gold Certified
  - Validated to be Formaldehyde-Free
- Does not contain polybrominated diphenyl ethers (PBDE) such as: Penta – BDE, Octa – BDE or Deca – BDE
- EUCEB Certified

STORAGE

- Inside storage is recommended. Protect stored Black Acoustical Board from water damage or abuse. If stored outside, stack cartons on pallets and cover adequately to prevent moisture infiltration.

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.

CONTRACTOR: _____

JOB: _____

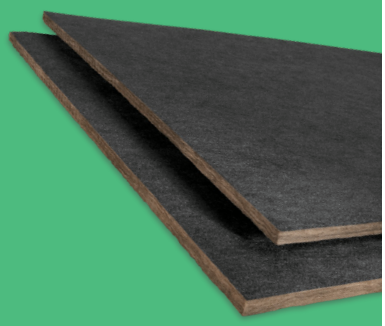
DATE: _____

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



NOTES

When condensation is permitted to occur between nested Black Acoustical Board and galvanized steel panels, discoloration of the metal may occur.

TECHNICAL DATA		
Property (Unit)	**Test**	**Performance**
Maximum Service Temperature	ASTM C411	250° F (121° C)
Mold Growth	ASTM C1338, G21, G22	Pass
Water Vapor Sorption (by weight)	ASTM C1104	3% or less
Surface Burning Characteristics (flame spread/smoke developed)	ASTM E84, UL 723, CAN/ULC S102	UL Classified FHC 25/50

SOUND ABSORPTION COEFFICIENTS I ASTM C423, TYPE A MOUNTING								
Product		Octave Band Center Frequency (cycles/sec.)						
Density	Thickness	125	250	500	1000	2000	4000	NRC
2.25 PCF (36 kg/m³)	2" (51 mm)	0.26	0.62	1.05	1.07	1.04	1.05	0.95
3.0 PCF (48 kg/m³)	1" (2 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	0.67	1.07	1.07	1.03	1.06	0.95

FORMS AVAILABLE*				
Density	Thickness	R-Value	Width	Length
2.25 PCF (36 kg/m³)	2" (51 mm)	R-8.7	24" (610 mm)	48" (1219 mm)
3.0 PCF (48 kg/m³)	1" (25 mm)	R-4.3		
	1½" (38 mm)	R-6.5		
	2" (51 mm)	R-8.7		

*Some products listed may be custom products. All custom product requests require approval from Knauf Insulation, regardless of whether the product has previously been produced. Special pricing and minimum order quantities will apply.

THERMAL CONDUCTIVITY "C"[1] AND RESISTANCE "R"[2] I ASTM C177			
Mean Temperature 75° F (24° C)			
Product		Conductance "C"	Resistance "R"
2.25 PCF (36 kg/m³)	2" (51 mm)	0.11 (0.62)	8.7 (1.53)
3.0 PCF (48 kg/m³)	1" (25 mm)	0.23 (1.31)	4.3 (0.76)
	1½" (38 mm)	0.15 (0.85)	6.5 (1.15)
	2" (51 mm)	0.11 (0.62)	8.7 (1.53)
"C Units" $\frac{BTU}{ft^2 \cdot hr \cdot °F}\left(\frac{W}{m^2 \cdot °C}\right)$ "R Units" $\frac{ft^2 \cdot hr \cdot °F}{BTU}\left(\frac{m^2 \cdot °C}{W}\right)$			

[1]The lower the value, the better the performance. [2]The higher the value, the better the performance.

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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