



Data Sheet

OEM-ASB-DS

09-17

Acoustical Smooth Board

with ECOSE[®] Technology



Acoustical Smooth Board with ECOSE® Technology

DESCRIPTION

Knauf Insulation Acoustical Smooth Board is a 6.0 PCF thermal and acoustical insulation product made from inorganic glass fibers preformed into boards with ECOSE Technology. The board is smooth on one side with precision cut tolerances.

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.

APPLICATION

Knauf Insulation Acoustical Smooth Board with ECOSE Technology is a versatile product for thermal and acoustical applications such as office partitions, ceiling panels, interior panels and sound baffles.

PRODUCT FEATURES

Density and Size Availability

- Available in the densities and sizes required by panel and ceiling manufacturers. Special items not shown on the price and data sheet can be made based on our process capability

Surface Smoothness

- One surface is skidded smooth which allows for flatness and uniformity

Precision Tolerances

- Tolerances are $\pm 1/16$ " (1.6 mm) for thickness and $\pm 1/8$ " (3.2 mm) for width and $\pm 1/4$ " (6.4 mm) length

Fabrication

- Suitable for machining

Noise Reduction

- Excellent sound absorption characteristics, an important benefit for today's office and interiors

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 six 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

PACKAGING

- The standard packaging is sheets on pallets. For other options contact your Knauf Insulation Territory Manager.

SPECIFICATION COMPLIANCE

In U.S.

- ASTM C612; Type IA and Type IB
- California Title 24
- HH-1-558C; Form A, Class 1 and Class 2
- NFPA 90A and 90B

In Canada

- CGSB 51-GP-10M

INDOOR AIR QUALITY

- UL Environment
 - GREENGUARD certified
 - GREENGUARD Gold certified
 - Validated to be formaldehyde-free

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 and physical properties of Knauf Insulation Acoustical Smooth Board with ECOSE® Technology represent typical 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.

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

Technical Data

Property (Unit)	Test	Performance
Corrossiveness	ASTM C665	Does not accelerate corrosion of steel
Corrosion	ASTM C1617	Pass
Maximum Service Temperature	ASTM C411	450 °F (232 °C) up to 4" product thickness
Shrinkage	ASTM C356	Less than 0.3% linear shrinkage
Water Vapor Sorption (by weight)	ASTM C1104	Less than 5%
Odor	ASTM 1304	Pass
Mold Growth	ASTM C1338	Pass
Surface Burning Characteristics (flame spread/smoke developed)	ASTM E84, CAN/ULC S102, NFPA 255, NFPA 90A and 90B, UL 723	25/50

Forms Available

Density	Thickness	Width Range †	Length Range	Current Minimum (ft ²)
6.0 PCF (96 kg/m ³)	¾" (19 mm)	24"-61" (610 mm-1549 mm)	48"-121" (1219 mm-3073 mm)	18,000
	1" (25 mm)			12,000
	1½" (38 mm)			9,000
	2" (51 mm)			6,000

All products are custom. It is recommended that Acoustical Smooth Board be sampled and evaluated prior to ordering.

†Tolerances: Thickness: ± 1/16" (1.59 mm); Width: ± 1/8" (3.2 mm); Length: ± 1/4" (6.4 mm). For requirements not listed, contact your Knauf Insulation Territory Manager.

Sound Absorption Coefficients | ASTM C423, Type A Mounting

Density	Thickness	Octave Band Center Frequency (cycles/sec.)						NRC
		125	250	500	1000	2000	4000	
6.0 PCF (96 kg/m ³)	1" (25 mm)	0.05	0.26	0.77	1.04	1.04	1.03	0.80
	1½" (38 mm)	0.13	0.58	1.01	1.05	1.00	1.01	0.90
	2" (51 mm)	0.32	0.81	1.08	1.06	1.03	1.04	1.00

Packaging Available

Product Dimensions	Package
24" x 48"	Carton
48" x 96"	Pallet
48" x 120"	Pallet
49" x 97"	Pallet
49" x 121"	Pallet

Thermal Conductivity | ASTM C177, 75°F Mean Temperature

Density	Thermal Conductivity (BTU-in. • ft ² • °F)
6.0 PCF (96 kg/m ³)	0.22

KNAUFINSULATION



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UL Environment GREENGUARD Certification Program

Acoustical Smooth Board is certified to UL Environment GREENGUARD standards for low chemical emissions into indoor air during product usage.

UL Environment GREENGUARD Gold Certification Program

Knauf Insulation has achieved UL Environment GREENGUARD Gold Certification for Acoustical Smooth Board.

For more information, visit ul.com/spot

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.

LEED v2009

MR Credit 4.1 - 4.2 Recycled Content
MR Credit 5.1 - 5.2 Regional Materials

LEED v4

Knauf Insulation offers several products for both envelope and mechanical systems that have ingredient disclosure and transparency. Please contact transparency@knaufinsulation.com for products that currently contribute to MR credits.