

# SilentFiber™ Formaldehyde Free Fiberglass Board

#### **TECHNICAL SPECIFICATION**

Categorized under the Silent Fiber Line, Knauf Ecose® Formaldehyde free boards are available plain or fabricated. These boards are an environmentally friendly brown formaldehyde free acoustical board with ECOSE technology, a plant base binder. It does not include phenol, acrylics or artificial colors found in traditional fiberglass board. These boards offer some of the most acoustic absorption ratings available.

Available in both plain brown or with a high impact facing. These boards offer the green advantage over regular fiberglass with no formaldehyde binders.

#### **Features**

- · Light weight, easy to handle and cut
- UL GreenGuard approved
- · UL Environment validated
- Excellent thermal efficiency
- · Effective at noise reduction
- · Does not promote the growth of mold, fungi or bacteria
- · Qualifies for LEED green building rating system
- ASTM E84 Class A fire rating
- · Made in the U.S.A.
- · Available dual density
  - 1/8" core adhered to a 1/8" lb face
  - Neutral formaldehyde free mat face
  - High impact resistant
  - ASTM E84 Class A

#### **Applications**

- · Acoustical Panels
- · Metal and masonry walls
- Wall and roof panel systems
- · Stretch wall systems

1/3 Octave Band Center Frequency (cycles/sec.)							
	125	250	500	1000	2000	4000	NRC
Thickness							
1" (25 mm)	.05	.26	.77	1.04	1.04	1.03	.80
2" (50 mm)	.32	.81	1.08	1.06	1.03	1.04	1.00
1" DD	.12	.60	.80	.90	.80	.72	.80



Plain



**Dual Density** 

#### **Thickness Dimension**

3/4" to 2"

#### **Sizes Available**

24" x 48" to 49" x 121"

For more information, please visit us at www.SoundAcousticSolutions.com

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Email: info@SoundAcousticSolutions.com

## Other acoustical products available from Sound Acoustic Solutions:

SilentCeiling Black™ (black fiberglass ceiling tiles)
SilentWrap™ (mass-loaded vinyl)
SilentImpact™ (rubber underlayment material)

**SilentCurtain™** (noise barrier products)



## SilentFiber™ Formaldehyde Free Fiberglass Board

## **TECHNICAL SPECIFICATION**

## **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.

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ECOSE® Technology gives the product its unique brown color.

#### **ECOSE® Technology**

ECOSE® Technology is a revolutionary binder chemistry that makes Knauf Insulation products even more sustainable than ever. It features rapidly renewable bio-based materials rather than non-renewable petroleum-based chemicals traditionally used in glass mineral wool insulation products. ECOSE® Technology reduces binder embodied energy and does not contain phenol, formaldehyde, acrylics or artificial colors.

#### **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.

#### **Features and Benefits**

Density and Size Availability

 Knauf Insulation Acoustical Smooth Board with ECOSE® Technology is 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 smooth which allows for flatness and uniformity.

#### **Precision Tolerances**

• Tolerances are  $+/-\frac{1}{16}$ " (1.6 mm) for thickness and  $+/-\frac{1}{8}$ " (3.2 mm) for width and  $+/-\frac{1}{4}$ " (6.4 mm) length.

#### **Fabrication**

The board is suitable for machining.

#### **Noise Reduction**

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

## **Indoor Air Quality**

 Certified for indoor air quality as a low emitting product by The GREENGUARD Environmental Institute to both the GREENGUARD Certification Program<sup>SM</sup> and the more stringent GREENGUARD Gold standard and verified to be formaldehyde free.

## Sustainability

- Carbon-negative: Knauf Insulation's products used for thermal insulating purposes recover the energy that it took to make them in just hours or a few 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 primary ingredients:
  - Minimum 50% recycled post-consumer glass content verified every 6 months by UL Environment.
  - Sand, one of the world's most abundant and renewable resources
  - Our green chemistry initiative ECOSE®
     Technology, which reduces binder embodied energy by up to 70%
- This product contains no materials or chemicals on the International Living Building Institute's Red Liet

#### **Packaging**

 The standard packaging is sheets on pallets. For other options contact your Knauf Insulation sales representative.

#### **Specification Compliance**

In U.S.:

- ASTM C 612; Type IA and Type IB
- GREENGUARD Certified®
- GREENGUARD Gold and verified to be formaldehyde free
- California Title 24
- HH-I-558C; Form A, Class 1 and Class 2
- NFPA 90A and 90B

In Canada:

CGSB 51-GP-10M

## **Technical Data**

Surface Burning Characteristics (UL Classified)

 Does not exceed 25 Flame Spread, 50 Smoke Developed when tested in accordance with ASTM E 84, CAN/ULC S102-M88, NFPA 90A and 90B, NFPA 255 and UL 723.

Temperature Range (ASTM C 411)

• Operating temperatures from 0°F to 450°F (-18°C to 232°C) up to 4" product thickness

Corrosiveness (ASTM C 665)

 Does not accelerate corrosion on steel, copper or aluminum.

Corrosion (ASTM C 1617)

 The corrosion rate in mils/yr will not exceed that of the 1 ppm chloride solution.

Shrinkage (ASTM C 356)

- Less than 0.3% linear shrinkage.
   Mold Growth (ASTM C 1338)
- Does not promote growth.

Water Vapor Sorption (ASTM C 1104)

- Less than 5% by weight.
   Odor (ASTM C 1304)
- Not objectionable.



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