

SilentFiber™ Thermal Mat

SilentFiber™ Thermal Mat is a 100% "E" fiberglass mat that is non-corrosive, non-combustible, and offers excellent acoustic properties. The mechanical composition and flexibility makes it an effective alternative to rigid acoustic boards. SilentFiber Thermal Mat is a perfect choice for applying acoustical treatment in high heat areas, curved surfaces and applications where flexibility is necessary.

SilentFiber™ Thermal Mat is available in thicknesses of ¼", ½" and 1", and contains no chemical binders. Instead, long textile fibers have been accurately chopped and mechanically stitched in a web form to provide maximum density, high insulation and strong acoustical properties in temperatures up to 1200°F.

SilentFiber™ Thermal Mat can be used for acoustical treatment on curved and non traditional surfaces due to its roll form. Available in a rolled form, SilentFiber™ Thermal Mat also can be transported and stored in small areas.

Features:

- Excellent vibration resistance
- Excellent sound absorption properties
- Easy to transport to the jobsite
- Odorless, non-combustible and non-toxic
- Water and moisture resistant
- Good drapeability - conforms to irregular surfaces

Physical Properties of SilentFiber™ Thermal Mat

Thickness (in.)	Mass (density lbs./cu./ft.)	Width (in.)	Roll Length (ft.)	Area (Sq. ft./roll)	Approx. Roll Weight (net lbs.)
¼"	9 to 11	60	150	750	188
½"	9 to 11	60	75	375	188
1"	9 to 11	60	45	225	225

Acoustical Performance

Thickness (in.)	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
¼"	.05	.10	.20	.45	.75	.85	.30
½"	.05	.10	.35	.75	.95	.90	.35
1"	.10	.30	.85	1.00	1.00	1.00	.60

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)



Applications

- Residential and commercial
- HVAC Heating/cooling metal ducts
- Automotive

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

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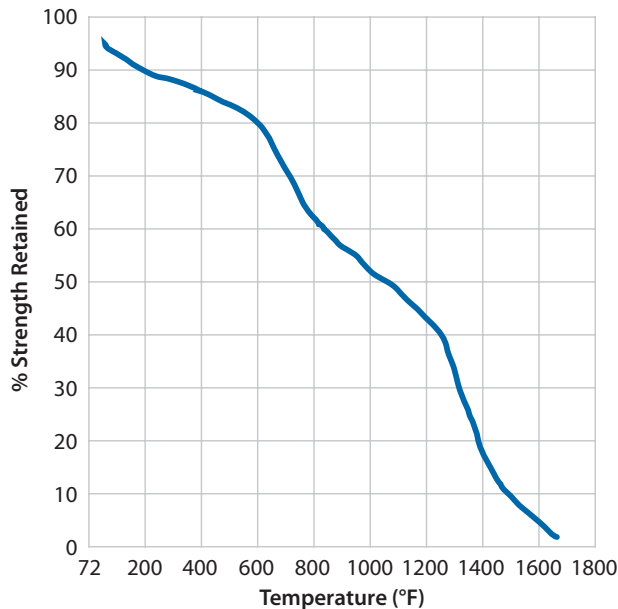
Physical Properties

Service Temperature..... Up to 1200°F
 Fire Resistance Incombustible
 Density (Approximate)..... 9 - 11 lbs./cu. ft.
 Moisture Absorption..... Negligible

Thermal Conductivity ("K" value at 9.1 lbs./cu. ft.):

Mean Temperature	"K"—btu/sq. ft./hr./°F/in.
300°F	0.40
500°F	0.50
700°F	0.65

Glass Filament Tensiles (at various temperatures)



Properties of Fiberglass "E" Glass

Physical/Mechanical Properties of Glass Fibers

Specific Gravity..... 2.60 grams/cc.
 Density 0.094 lbs./cu. in.
 Tensile Strength (PSI×10³ @ 70°F)..... .500 lbs.
 Modulus of Elasticity (PSI×10 @ 72°F)..... 10.5 lbs.
 After Heating (PSI×10 @ 1000°F)..... 11.8 lbs.
 Elongation (@ 72°F)..... 4.8%

Thermal Properties of Bulk Glass

Softening Point..... 1500°F
 Strain Point..... 1100°F
 Annealing Point..... 1200°F

Electrical Properties of Bulk Glass

Dielectric Constant
 1 MHz @ 72°F..... 6.33
 10kHz @ 72°F..... 6.13
 Power Factor
 1MHz @ 72°F 0.001
 10kHz @ 72°F..... 0.0039

Note: The physical and performance properties cited in this literature have been derived in tests conducted by various fiber companies.

Tests have been conducted on both fiber and fabrics woven with bulked glass fiber.

Reference to U.S. Government specification values as well as information provided on certain end uses which currently use bulked glass are presented for the information of potential customers in determining the potential suitability of these products for their own applications. No claims are made as to the accuracy or applicability of the test methods employed or the results derived therefrom.

Important Cautionary Note: Items of protective equipment manufactured from fiberglass fabrics such as aprons, gloves, mittens, etc. should be labeled to show the maximum short-term and continuous-exposure temperature limits established in accordance with the standard specifications applicable to the item of equipment being offered.

Other acoustical products available from Sound Acoustic Solutions:

SilentCeiling™ Black (black fiberglass ceiling tiles)

SilentWrap™ (mass-loaded vinyl)

SilentImpact™ (rubber underlayment material)

SilentFIBER™ Wall Panels (sound absorption wall panels)

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