

MICROLITE® THERMAL AND ACOUSTICAL INSULATION

DATA SHEET

DESCRIPTION

Microlite® fiberglass equipment insulation is a lightweight and highly resilient blanket-type thermal and acoustical insulation made of flame-attenuated glass fibers bonded with a thermosetting resin. The countless air spaces in Microlite create effective sound absorption as well as thermal properties. Perceived noise from air movement and mechanical equipment is noticeably reduced.

The borosilicate glass fibers that make up Microlite insulation are noncombustible and non-hygroscopic. Microlite does not support fungi or vermin. Microlite is unaffected by oil, grease and most acids.

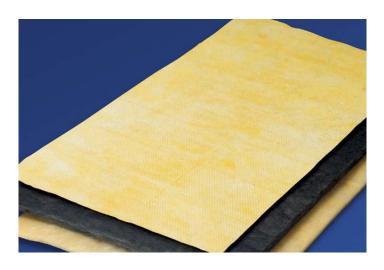
Because of their resiliency, high tensile strength and flexibility, Microlite blankets resist settling, breakdown, sagging from vibration, shakedown and damage from impact. Microlite equipment insulation forms easily around corners and curved surfaces and is readily cut in die-cut presses or with a knife.

The high tensile strength inherent in Microlite blankets helps the product resist damage during fabrication and installation. Microlite is used in a variety of appliance, equipment, and office furniture applications that require high thermal and acoustical efficiency in a minimal space. Ease of fabrication, high tensile strength and resilience, uniform appearance and resistance to vibration and shakedown are additional qualities.

Microlite is compression packaged to significantly reduce volume. The result is potential savings in both freight costs and storage.

STANDARD THICKNESSES AND DENSITIES

Den	sity	Thicl	cness	Roll Length		
pcf	kg/m³	in	mm	ft	m	
0.60	9	1/2, 3/4	13, 19	300	91.4	
		1, 1½, 2	25, 38, 51	150	45.7	
		21/2, 3	64, 76	50	15.2	
	12	1/2, 3/4	13, 19	250	76.2	
0.75		1, 1½	25, 38	150	45.7	
0.75		2	51	100	30.5	
		3	76	50	15.2	
	16	1/4, 3/8	6, 10	300	91.4	
1.0		1/2, 3/4	13, 19	250	76.2	
1.0		1, 1½	25, 38	100	30.5	
		2, 2½, 3	51, 64, 76	50	15.2	
	24	1/4, 3/8	6, 10	250	76.2	
1.5		1/2, 3/4	13, 19	150	45.7	
1.0		1	25	100	30.5	
		1½, 2	38, 51	50	15.2	
	32	1/4, 3/8	6, 10	200	61.0	
2.0		1/2, 3/4	13, 19	100	30.5	
		1, 1½	25, 38	50	15.2	
	40	1/4, 3/8	6, 10	200	61.0	
2.5		1/2, 3/4	13, 19	100	30.5	
		¾, 1	19, 25	50	15.2	
3.0	48	1/4, 3/8	6, 10	200	61.0	
		3/8,1/2	10,13	100	30.5	
		3⁄4, 1	19, 25	50	15.2	



SPECIFICATIONS

Temperature Limit	350°F (177°C)
Fire Hazard Classification ASTM E84, UL 723, and CAN/ ULC S102, Meets	25 Flame Spread 50 Smoke Developed

APPLICATIONS

NFPA 90A and 90B

- Acoustical Panels/ Partitions
- HVAC Equipment
- Pipe Wrap Kits
- Appliances

ADVANTAGES

- High Thermal Efficiency
- High Acoustical Performance
- · High Tensile Strength
- Uniform Density Distribution
- · Excellent Dimensional Uniformity
- · Ease of Handling

CUSTOM FABRICATION

The Johns Manville nationwide network of Approved Fabricators specializes in secondary processing to supply custom parts to meet specific customer requirements. Die-cutting, laminating, special packaging and just-in-time delivery are just a few of the multiple capabilities our fabricators can provide.



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THERMAL CONDUCTIVITY (K) PER ASTM C518

Dens	sity	ty 25°F (-4°C) Mean Temp.		50°F (10°C) Mean Temp.		75°F (24°C) Mean Temp.		100°F (38°C) Mean Temp.		200°F (93°C) Mean Temp.	
pcf	kg/m³	Btu•in/(hr•ft²•°F)	W/m•°C	Btu•in/(hr•ft²•°F)	W/m•°C	Btu•in/(hr•ft²•°F)	W/m•°C	Btu•in/(hr•ft²•°F)	W/m•°C	Btu•in/(hr•ft²•°F)	W/m•°C
0.60	9	0.26	0.037	0.28	0.040	0.30	0.043	0.33	0.048	0.46	0.066
0.75	12	0.25	0.036	0.27	0.039	0.29	0.042	0.31	0.045	0.44	0.063
1.0	16	0.23	0.033	0.25	0.036	0.26	0.037	0.29	0.042	0.38	0.055
1.5	24	0.22	0.032	0.23	0.033	0.24	0.035	0.27	0.039	0.34	0.049
2.0	32	0.21	0.030	0.22	0.032	0.23	0.033	0.24	0.035	0.31	0.045
3.0	48	0.20	0.029	0.21	0.030	0.22	0.032	0.23	0.033	0.30	0.043

ACOUSTICAL PERFORMANCE

Type "A" Mounting Sound Absorption Coefficients*

Density		Thicknesses		Frequency (Hz)						
pcf	kg/m³	in	mm	125	250	500	1000	2000	4000	NRC**
0.60	9	1/2	13	0.06	0.16	0.34	0.52	0.62	0.72	0.40
		1	25	0.12	0.31	0.56	0.73	0.83	0.88	0.60
		1 ½	38	0.19	0.53	0.81	0.91	0.94	0.98	0.80
		2	51	0.23	0.65	0.90	0.98	0.98	1.01	0.90
1.0		1/2	13	0.07	0.20	0.34	0.52	0.63	0.65	0.40
	16	1	25	0.08	0.34	0.59	0.75	0.83	0.81	0.65
		2	51	0.23	0.58	0.91	0.96	0.98	1.03	0.85
1.5	24	1/2	13	0.05	0.12	0.34	0.57	0.69	0.79	0.45
		1	25	0.09	0.32	0.65	0.87	0.95	1.00	0.70
2.0	32	1/4	6	0.01	0.05	0.15	0.30	0.50	0.6	0.25
		1/2	13	0.02	0.13	0.30	0.56	0.71	0.87	0.45
		1	25	0.11	0.30	0.66	0.88	1.00	1.01	0.70
2.5	40	1/4	6	0.00	0.05	0.16	0.34	0.52	0.68	0.25
		1/2	13	0.06	0.16	0.35	0.62	0.79	0.93	0.50
		3/4	19	0.04	0.26	0.56	0.83	0.96	1.01	0.65
3.0	48	1/4	6	0.03	0.05	0.13	0.30	0.51	0.72	0.25
		1/2	13	0.01	0.12	0.32	0.64	0.83	0.98	0.50
		1	25	0.11	0.32	0.77	1.01	1.04	1.05	0.80

^{*}Tested in accordance with ASTM C423, Type "A" mounting per ASTM E795.



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OEM CUSTOMER SERVICE

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PRODUCT & TECHNICAL INFORMATION

800-654-3103

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of Microlite listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit www2.jm.com/terms-conditions or call (800) 654-3103.

^{**}Noise reduction coefficient.