



Microlite®

Thermal and Acoustical Insulation

Microlite Fiber Glass 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.

Appliance and Equipment Applications.

Microlite is used in a variety of appliance, equipment, and office furniture applications which 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.

The Advantages of Using Microlite.

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

The high tensile strength inherent in Microlite blankets helps the product resist damage during fabrication and installation.

Because of their resiliency and flexibility, Microlite blankets resist settling, breakdown, sagging from vibration, 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.

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

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.

Available Forms. Microlite is available in a variety of densities, thicknesses, widths, and roll lengths. Microlite equipment insulation can be supplied, either amber or black.

Custom Fabrication. In addition, a Johns Manville Approved Fabricator can apply custom facings and fabricate to meet your specific service conditions and performance requirements.



Applications:

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

Insulation Properties:

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

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Specifications

Temperature Limit:

350° F (177° C)

Fire Hazard Classification:

25/50 (per ASTM E 84 and UL 723 and CAN/ULC S102 - M88). Labels supplied when requested on order. Meets NFPA 90A and 90B.

Fabricated Products:

Johns Manville Microlite fiber glass equipment insulation is manufactured to specific customer width requirements. Contact your Johns Manville sales representative for limitations. Die-cut or fabricated pieces are generally supplied by one of the strategically-located Johns Manville fabricators which is specially equipped to provide prompt service to manufacturers in their area.

For Information

Write Johns Manville Product Information Center, P.O. Box 5108, Denver, Colorado 80217-5108, or call toll-free 1-800-654-3103 (outside Colorado); (303) 978-4900 (inside Colorado).

Limited Warranty

All Johns Manville products are sold subject to Johns Manville's Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville Limited Warranty and Limitation of Remedy, write to:

Johns Manville Product
Information Center
P.O. Box 5108
Denver, CO 80217-5108

or call toll free: 1-800-654-3103 or contact your local Johns Manville sales representative.

Standard Thicknesses and Densities

Density		Thicknesses		Roll Length	
pcf	kg/m ³	inches	mm	feet	M
0.60	9.6	1/2, 3/4	13, 19, 25	400	121.92
		1/2, 3/4	13, 19	300	91.44
		1, 1 1/2, 2	25, 38, 51	150	45.72
		3, 4	76, 102	50	15.24
0.75	12.0	1/2, 3/4	13, 19	250	76.20
		1, 1 1/2, 2	25, 38, 51	150	45.72
		3, 4	76, 102	50	15.24
		1/4, 3/8	6, 10	300	91.44
1.0	16.0	1/2, 3/4	13, 19	200	60.96
		1, 1 1/2	25, 38	100	30.48
		2, 3	51, 76	50	15.24
		1/4, 3/8	6, 10	250	76.20
1.5	24.0	1/2, 3/4	13, 19	150	45.72
		1	25	100	30.48
		1 1/2, 2	38, 51	50	15.24

Density		Thicknesses		Roll Length	
pcf	kg/m ³	inches	mm	feet	M
2.0	32.0	1/4, 3/8	6, 10	200	60.96
---	---	1/2, 3/4	13, 19	100	30.48
---	---	1, 1 1/2	25, 38	50	15.24
2.5	40.0	1/4, 3/8	6, 10	200	60.96
---	---	1/2, 3/4	13, 19	100	30.48
---	---	1	25	50	15.24
3.0	48.1	1/4, 3/8	6, 10	200	60.96
---	---	1/2, 3/4	13, 19	100	30.48

Thermal Conductivity (k)*

Density		Mean Temp. °F (°C)		Btu•in./(hr. •ft. ² • °F)		W/mK					
pcf	kg/m ³	25°	-3°C	50°	11°C	75°	23°C	100°	37°C	200°	93°C
0.60	9.6	.26	.037	.28	.040	.30	.043	.33	.048	.46	.066
0.75	12.0	.25	.036	.27	.039	.29	.042	.31	.044	.44	.063
1.0	16.0	.23	.033	.25	.036	.26	.039	.29	.042	.38	.055
1.5	24.0	.22	.032	.23	.033	.24	.035	.27	.039	.34	.049
2.0	32.0	.21	.030	.22	.032	.23	.033	.24	.035	.31	.044
3.0	48.1	.20	.029	.21	.030	.22	.032	.23	.033	.30	.043

Acoustical Performance Type "A" Mounting Sound Absorption Coefficients*

Density		Thicknesses		Frequency (Hz)						
pcf	kg/m ³	inches	mm	125	250	500	1000	2000	4000	NRC**
0.60	9.6	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 1/2	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	16.0	1/2	13	0.07	0.20	0.34	0.52	0.63	0.65	0.40
		1	25	0.08	0.34	0.59	0.75	0.86	0.81	0.65
		2	51	0.23	0.58	0.91	0.97	0.98	1.03	0.85
		1.5	24.0	1/2	13	0.06	0.16	0.39	0.62	0.75
2.0	32.0	1	25	0.09	0.32	0.65	0.87	0.95	1.00	0.70
		1/2	6	0.01	0.05	0.15	0.30	0.50	0.66	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	40.0	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	1/4	6	0.03	0.05	0.13	0.30	0.51
3.0	48.1	1/2	13	0.01	0.12	0.32	0.64	0.83	0.98	0.50
		1	25	0.11	0.35	0.77	1.01	1.04	1.05	0.80

* Tested in accordance with ASTM C 423-00 and ASTM E 795-00

** Noise Reduction Coefficient

The physical and chemical properties of Johns Manville Microlite represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. The data is supplied as a technical service and is subject to change without notice. Check with your Johns Manville representative to obtain current information.



Johns Manville
Performance Materials
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