



Microlite® AA Premium NR Blankets

Aircraft Acoustical and Thermal Insulation

Description

Microlite® AA Premium NR is a lightweight, flexible, thermal and acoustical insulation material designed to provide the ultimate in noise reduction at minimal weight. Microlite® AA Premium NR blankets are formed from resin-bonded borosilicate 902 biosoluble glass fibers.

Applications

Microlite® AA Premium NR reduces thermal and acoustical transmission in a variety of aerospace applications. These blankets are particularly well suited for insulating the fuselage wall cavities of commercial and business aircraft.

Advantages

Microlite® AA Premium NR offers performance similar to standard Microlite® AA at 20% less weight. Microlite® AA Premium NR blankets, bonded with a thermosetting phenolic resin, are noncombustible and meet industry and government standards for smoke density, smoke toxicity and total heat release. Microlite® AA Premium NR is non-cellular, water repellent and will not support biological growth. Its gray color easily blends with common fabricating films and tapes.



Type:
Flexible Blanket

Temperature Limit:
450°F (232°C)

Available Forms

Microlite® AA Premium NR Blankets are light gray in color and furnished in three different densities in rolls up to 72" wide.

Standard Sizes

Density, lbs./ft. ³ (kg./m ³)	Thickness, in. (mm)
0.34 (5.5)	1 (25.4)
0.50 (8.0)	1 (25.4)
1.20 (19.2)	3/8 (9.5)

Applications

- Aerospace
- Fuselage Wall Cavities of Aircraft

Properties

- High Noise Reduction
- Water Repellent
- Low Heat Transfer
- Biosoluble Chemistry
- Noncombustible and Non-Punking
- Excellent Strength and Stability
- Low Smoke Density and Toxicity

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Thermal Conductivity (Btu-In.)/(Hr. - Ft² - °F) (ASTM C-518)

Density (lb./ft ³)	Mean Temp. °F (Between hot and cold surface)					
	50°	75°	100°	200°	300°	400°
0.34	0.27	0.28	0.31	0.42	0.55	0.71
0.5	0.24	0.25	0.27	0.35	0.45	0.58
1.2	0.21	0.21	0.24	0.29	0.36	0.44

Thermal Conductivity (Watts/Meter-°C) (ASTM C-518)

Density (kg/m ³)	Mean Temp. °C (Between hot and cold surface)					
	10°	24°	38°	93°	149°	204°
5.5	.039	.040	.045	.061	.079	.102
8.0	.035	.036	.039	.051	.065	.084
19.2	.030	.030	.035	.042	.052	.064

Sound Attenuation (Sound Transmission Loss, dB) (ASTM E-90)

Density x Thickness	Frequency (Hz)					
	125	250	500	1000	2000	4000
3 Layers						
0.34 PCF x 1 inch (5.5kg/m ³ x 25mm)	4.0	3.1	5.0	9.6	15.0	21.4
0.5 PCF x 1 inch (8.0kg/m ³ x 25mm)	4.9	3.7	6.1	13.3	23.4	36.1
1.2 PCF x .375 inch (19.2kg/m ³ x 9.5mm)	4.8	4.0	4.8	9.5	17.9	29.8

Anechoic Test Chamber



An intensity probe is used for both scanning and point to point mapping of power radiated from a simulated aircraft fuselage. Such techniques measure the attenuation of the overall system as well as the performance of specific elements within the construction.

Compliance with Specifications

DMS 2385, FAR 25.853, OSU 65/65, BMS 8-48

■ For Information

Write: Johns Manville Product Information Center, P.O. Box 5108, Denver, Colorado 80217-5108
 Call: Toll free 1-800-654-3103 (outside Colorado); or (303) 978-4900 (inside Colorado)
 Online: www.jm.com

■ 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.



Johns Manville

**Johns Manville
 OEM Insulations Division**

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The physical and chemical properties of Johns Manville Microlite® AA Premium NR Blankets 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.