

OEM INSULATION

MICRO-FIBER® FELT BINDERLESS FELT

DATA SHEET

DESCRIPTION

Micro-Fiber® Felt is formed from Type 475 borosilicate glass fibers using a water deposition process. The result is a clean, flexible, binderless felt with excellent handling qualities.

ADVANTAGES

- Lightweight
- Flexible
- No outgassing
- Excellent acoustic properties
- Excellent chemical stability
- Low shrinkage
- Moisture resistance
- Low thermal conductivity
- Thermal shock resistance
- Good handleability
- Noncorrosive
- Noncombustible

AVAILABLE FORMS

Micro-Fiber Felt is available in sheets 36" (914 mm) wide and 60" (1,524 mm) or 120" (3,048 mm) long.

Micro-Fiber Felt is manufactured based on areal weight (weight per area) and is not produced or dimensioned to an exact thickness or density.

For approximation purposes, refer to the table below

Nomina	l Density	Nominal [•]	Thickness	Areal Weight		
pcf	kg/m³	in	mm	lb/ft ²	kg/m²	
3	48	1⁄2	12.7	0.125	0.61	
4	64	³ ⁄16	4.8	0.063	0.31	
		1⁄4	6.4	0.083	0.41	
		1⁄2	12.7	0.167	0.81	
		1	25.4	0.333	1.63	
6	96	3⁄16	4.8	0.094	0.46	
		1⁄4	6.4	0.125	0.61	
		3⁄8	9.5	0.188	0.92	
		1/2	12.7	0.250	1.22	



TYPE

Binderless Felt

TEMPERATURE LIMIT

900°F (482°C)

APPLICATIONS

Micro-Fiber Felt is intended for use in applications where highly effective thermal and acoustic insulation is required in a medium temperature range. These materials are also highly effective when used as air and gas filtration media in a medium temperature range. Common applications include:

- Aircraft
- Jet engine ducting
- Air and gas filtration
- Cryogenics
- Missiles
- Spacecraft

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THERMAL CONDUCTIVITY (Btu • in)/(ft2• hr • °F) (ASTM C-518)

Nominal	Mean Temp. °F (between hot surface and cold surface)								
Density (pcf)	100°F	200°F	300°F	400°F	500°F	600°F	700°F	800°F	900°F
3	0.23	0.27	0.32	0.37	0.42	0.48	0.55	0.62	0.70
4	0.23	0.26	0.31	0.35	0.40	0.45	0.51	0.57	0.64
6	0.22	0.26	0.30	0.33	0.37	0.40	0.44	0.48	0.54

THERMAL CONDUCTIVITY (Watt/Meter • °C) (ASTM C-518)

Nominal	Mean Temp. °C (between hot surface and cold surface)								
Density (kg/m³)	38°C	93°C	149°C	204°C	260°C	316°C	371°C	427°C	482°C
48	0.033	0.039	0.046	0.053	0.061	0.069	0.079	0.089	0.101
64	0.033	0.038	0.045	0.050	0.058	0.065	0.074	0.082	0.092
96	0.032	0.038	0.043	0.048	0.053	0.058	0.063	0.069	0.078

ACOUSTIC PERFORMANCE (ASTM E90 Sound Transmission Loss)*

	Frequency (Hz)							
	125	250	500	1000	2000	4000	STC	
Transmission Loss (dB)	5.3	6.4	8.9	12.5	11.9	23.8	12	

*Test performed on Type 475 @ 3 pcf x 1 inch (48 kg/m³ x 25 mm).



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INSULATION SYSTEMS OEM INSULATIONS OEM CUSTOMER SERVICE 800-426-2435

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 Microfiber Felt 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.

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