

Industrial Insulation

Thermafiber® Industrial Felt



Thermafiber Industrial Felt is adaptable for a broad scope of applications such as sound booths, dryers, kilns, tanks, and ovens.

- + Fire resistant to temperatures above 2,000°F (1,093°C)
- + Excellent thermal performance (R-Value up to 4.2 per inch)
- + Excellent sound and noise absorption
- + Easily fabricated and installed
- + Moisture resistant
- + Mold resistant



The fine-fiber, semi-rigid composition makes Industrial Felt easy to handle, fabricate, and install for a broad range of applications.



Thermafiber[®]
THE **NAME** IN MINERAL WOOL™



Made in the USA

Thermafiber® Industrial Felt

Description:

THERMAFIBER Industrial Felt is an economical mineral fiber board for thermal, fire protection, and sound control applications. The fine-fiber, semi-rigid composition makes industrial felt easy to handle. It is available from 2.5 pcf to 12.0 pcf density along with many different facing options if needed. The wide range of densities make Thermafiber felt adaptable for industrial applications in a broad scope of low or high temperature applications. These asbestos-free products adsorb less than 1% moisture, are vermin-proof and mold resistant. On initial start-up only, heat rise should not exceed 15°F per minute to allow binder to dissipate without excessive temperature rise. Thermal conductivity is not affected.

Product Options:

Recycled Content Options¹:

- Special "Green" Fiber 90%
 - Standard Fiber 70%
- ¹Recycled content options other than Standard must be specified at time of order.

Standard Sizes:

Density	Thickness*	Widths**	Lengths**
2.5 – 4.5 pcf	1 ½" – 6"	24", 36, 72"	48", 60", 72"
6 pcf	1" – 6"	24", 36, 72"	48", 60", 72"
7 -8 pcf	1" – 5"	24", 36, 72"	48", 60", 72"
9 pcf	1" – 4"	24", 36, 72"	48", 60", 72"
10 pcf	1" – 3"	24", 36, 72"	48", 60", 72"
12 pcf	1"-2 ½"	24", 36, 72"	48", 60", 72"
Tolerances	-1/8", +1/4"	± 1/8"	± 1/2"

*Thicknesses are available in ½" increments. **Custom sizes are available upon request.

Technical Data:

Density	Thermal Conductivity ¹ tested to ASTM C 518							Tested to ASTM E 84			
	K-factor – Btu • in/hr •ft ² •°F							Unfaced		Foil Faced	
	75°	150°	200°	300°	400°	500°	700°	Flame Spread	Smoke Developed	Flame Spread	Smoke Developed
2.5	.26	-	.40	.51	-	-	-	0	0	25	0
3.0	.25	-	.35	.45	-	-	-	0	0	25	0
3.5	.25	-	.35	.44	-	-	-	0	0	25	0
4.0	.24	-	.34	.42	.51	.60	-	0	0	25	0
4.5	.24	-	.33	.41	.49	.58	-	0	0	25	0
6.0	.24	-	.30	.38	.46	.56	-	0	0	25	0
7.0	.24	-	.30	.37	.45	.55	-	0	0	25	0
8.0	.24	-	.29	.35	.43	.53	-	0	0	25	0
9.0	.24	-	.28	.34	.42	.51	-	0	0	25	0
10.0	.24	.27	-	.34	-	.48	.67	0	0	25	0
12.0	.25	.28	-	.34	-	.47	.61	0	0	25	0

¹Degrees represent mean temperature

NRC Data: Coefficients at Frequencies per ASTM C 423								
Density	Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
4 pcf	1"	.06	.24	.58	.81	.85	.90	.60
6 pcf	1"	.07	.24	.62	.87	.91	.91	.65
8 pcf	1"	.10	.37	.82	.97	.91	.89	.75
12 pcf	1"	.09	.31	.77	.96	.99	.94	.75
4 pcf	2"	.33	.71	1.13	1.15	1.08	1.09	1.00
6 pcf	2"	.36	.79	1.15	1.04	1.01	1.04	1.00
8 pcf	2"	.35	.84	1.08	1.04	.96	.93	1.00
12 pcf	2"	.40	.79	.78	.94	.94	.87	.85
2.5 pcf	4"	.83	1.19	1.27	1.12	1.12	1.13	1.20
4 pcf	4"	1.01	1.26	1.23	1.13	1.11	1.09	1.20
6 pcf	4"	1.15	1.17	1.18	1.03	1.06	1.08	1.10

Maximum Hot Surface Temperature One Side (enclosed panel) per ASTM C 411	
Density	Maximum ° F
2.5 pcf	400
3.0 pcf	500
3.5 pcf	600
4.0 -5.0 pcf	850
6.0-7.0 pcf	1,200
8.0-10.0 pcf	1,200
12.0 pcf	1,350

Note: Temperatures above 450° require mechanical support

Standards Compliance:

- ASTM E 136** Rated Non-combustible per NFPA Standard 220
- ASTM C 665** Non-Corrosive
- MIL-I-24244** Meet applicable analysis for austenitic stainless steel
- ASTM C 612** 3.0 pcf IA 4.0-4.5 pcf 1A, 1B, II 6.0-8.0 pcf Type 1A, 1B, II, III, IVA
- ASTM C 612** 9.0-10.0 pcf 1A, 1B, II, III, IVA, IVB 12.0 pcf 1B, II, III, IV (Expect linear shrinkage over 1,300°F)
- ASTM C 553** 3.0-12.0 Type III
- ASTM C 1104** Adsorption less than 1% by volume
- ASTM C 165** 12 pcf-590 psf@10% compression, 10pcf – 460 psf@10% compression

For Further Information:

For additional information about these or other Thermafiber products contact us at 1-888-834-2371 or visit our website www.thermafiber.com.

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Submittal Approvals:

Job Name	
Contractor	Date

