# **Industrial Insulation**

# Thermafiber® Industrial Felt

- + 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

Minimum
70%
Recycled
Content





# IF477/Rev 02-14 Copyright 2014, Thermafiber, Inc. All Rights Reserved. Photo #1 is provided by Koch LLC

## 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 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:

Standard Sizes:

Density	Density Thickness*		Lengths**	
2.5 – 4.5 pcf	1 ½" – 7"	24", 36, 72"	48", 60", 72"	
6 pcf	1" - 7"	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"	

Technical Data:

	Thermal Conductivity <sup>1</sup> tested to ASTM C 518						Tested to ASTM E 84				
	K-factor – Btu • in/hr •ft² •°F						Unfa	iced	Foil Faced		
Density	75°	150°	200°	300°	400°	500°	700°	Flame Spread	Smoke Developed	Flame Spread	Smoke Developed
2.5	.27	-	.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

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 pcf -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 – 4.5pcf IA, IB, II, III, IVA 6.0 – 8.0 pcf IA, IB, II, III, IVA

ASTM C 612 9.0-10.0 pcf IA, IB, II, III, IVA, IVB 12.0 pcf IB, 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.

Notice:

THERMAFIBER, Inc. shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. THERMAFIBER liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing within thirty (30) days from date it was or reasonably should have been discovered.

Submittal Approvals:

Job Name	
Contractor	Date

