



**AK BOARD™** is a thermal and acoustical insulation product made from inorganic glass fibers preformed into boards bonded by a thermosetting resin. It is available plain or with factory applied FSK or All Service Jacket (ASJ) facings.

## USES

Manson AK BOARD™ is a versatile product for thermal and acoustical applications such as: heating and air conditioning ducts, power and process equipment, boiler and stack installations, metal and masonry walls, wall and roof panel systems, curtain wall assemblies and cavity walls.

## AVAILABILITY

Manufactured dimensions are listed in the Manson Insulation product catalog.

### SPECIFICATION COMPLIANCE

ASTM C 612

- Standard specification for mineral fiber board insulation
- Type IA (1.6, 2.25, 3.0, 4.25, 6.0 PCF) (26, 36, 48, 68, 96 kg/m<sup>3</sup>)
- Type IB (3.0, 4.25, 6.0 PCF) (48, 68, 96 kg/m<sup>3</sup>)

ASTM C 1136 (facings):

- FSK: Type II
- ASJ: Type I, II

California Title 24

City of New York MEA 324-83-M

Puncture Resistance (TAPPI Test T803) (Beach Units)

FSK facings: 25

ASJ facings: 50

### PRODUCT FEATURES

Greenguard Certification

- Over 50% post-consumer recycled glass

EUCB

- This product is tested and certified to meet EUCB requirements.

Water Vapor Transmission (ASTM E 96, Procedure A)

- FSK & ASJ vapor retarders have maximum vapor transmission rate of .02 perms

Water Vapor Sorption (ASTM C 1104)

- Less than 5% by weight when exposed to air at 120°F (49°C) and 95% humidity for 96 hours

Shrinkage (ASTM C356)

- Less than 0.3% linear shrinkage

Microbial Growth (ASTM C1338, G-21, G-22)

- Does not promote or support the growth of mold, fungi or bacteria

CGSM 51-GP-10M

- Canadian specification for mineral fiber board insulation

Fire Hazard Classification

- (UL 723, CAN/ULC-S102-M-88, ASTM E84, NFP90A & 90B)
- Flame spread index not exceeding 25 and smoke developed index not exceeding 50

Corrosiveness (ASTM C 665)

- Will not accelerate corrosion of aluminum, steel or copper

CONTRACTOR:

JOB NAME:

DATE:

# AK BOARD™

Temperature Limit: 450°F (232°C)

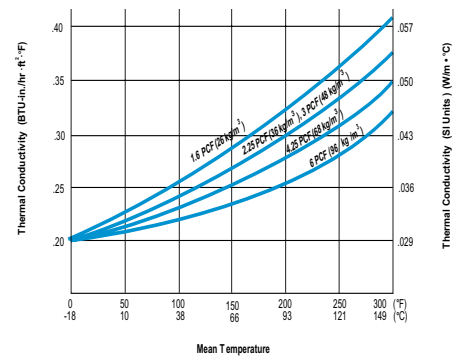
## Sound Absorption Coefficients (ASTM C423, Type A Mounting)

Type	Facing	Thickness	1/3 Octave Band Center Frequency (cycles/sec.)							
			125	250	500	1000	2000	4000	NRC	
1.6 PCF (26 kg/m³)	Plain	1.5" (38 mm)	0.19	0.44	0.86	0.98	1.00	1.02	0.80	
		2" (51 mm)	0.31	0.57	0.96	1.04	1.03	1.03	0.90	
		2.5" (64 mm)	0.43	0.82	1.12	1.07	1.04	1.03	1.00	
		3" (76 mm)	0.47	0.92	1.17	1.06	1.06	1.04	1.05	
2.25 PCF (36 kg/m³)	Plain	1" (25 mm)	0.05	0.24	0.59	0.86	0.97	1.00	0.65	
		1.5" (38 mm)	0.17	0.49	0.93	1.03	1.03	0.99	0.85	
		2" (51 mm)	0.26	0.62	1.05	1.07	1.04	1.05	0.95	
	FSK	1" (25 mm)	0.14	0.69	0.81	0.99	0.55	0.27	0.75	
3.00 PCF (48 kg/m³)	Plain	1" (25 mm)	0.08	0.23	0.62	0.88	0.96	0.99	0.65	
		1.5" (38 mm)	0.09	0.39	0.89	1.03	1.06	1.01	0.85	
		2" (51 mm)	0.29	0.65	1.11	1.13	1.06	1.03	1.00	
		3" (76 mm)	0.54	1.01	1.18	1.07	1.07	1.04	1.10	
	FSK	1" (25 mm)	0.21	0.63	0.84	0.93	0.51	0.22	0.75	
		1.5" (38 mm)	0.45	0.60	0.99	0.73	0.53	0.27	0.70	
		2" (51 mm)	0.67	0.77	0.93	0.74	0.47	0.28	0.75	
		ASJ	1" (25 mm)	0.15	0.71	0.65	0.82	0.41	0.16	0.65
	ASJ	1.5" (38 mm)	0.42	0.55	0.91	0.69	0.40	0.23	0.65	
		2" (51 mm)	0.75	0.71	0.80	0.66	0.41	0.24	0.65	
	4.25 PCF (68 kg/m³)	Plain	1" (25 mm)	0.06	0.24	0.69	0.99	1.05	1.02	0.75
		ASJ	2.5" (64 mm)	0.75	0.63	0.63	0.62	0.41	0.25	0.55
6.00 PCF (96 kg/m³)	Plain	1" (25 mm)	0.05	0.26	0.77	1.04	1.04	1.03	0.80	
		1.5" (38 mm)	0.61	0.47	0.78	0.61	0.51	0.35	0.60	
		2" (51 mm)	0.13	0.58	1.01	1.05	1.00	1.01	0.90	
	FSK	1" (25 mm)	0.23	0.65	0.391	0.48	0.47	0.32	0.50	
		1.5" (38 mm)	0.61	0.47	0.78	0.61	0.51	0.35	0.60	
		2" (51 mm)	0.77	0.50	0.72	0.58	0.53	0.41	0.60	
	ASJ	1.5" (38 mm)	0.60	0.46	0.62	0.48	0.47	0.31	0.50	
		2" (51 mm)	0.77	0.44	0.60	0.50	0.41	0.30	0.50	

## Forms Available\*

Density (PCF)	Thickness	R-Value	(R-SI)
1.6 (26 kg/m³)	1 1/2" (38 mm)	6.3	(1.1)
	2" (51 mm)	8.3	(1.5)
	3" (76 mm)	12.5	(2.2)
2.25 (36 kg/m³)	1" (25 mm)	4.3	(0.8)
	1 1/2" (38 mm)	6.5	(1.1)
	2" (51 mm)	8.7	(1.5)
	3" (76 mm)	13.0	(2.3)
3.0 (48 kg/m³)	1" (25 mm)	4.3	(0.8)
	1 1/2" (38 mm)	6.5	(1.1)
	2" (51 mm)	8.7	(1.5)
	2 1/2" (64 mm)	10.9	(1.9)
4.25† (68 kg/m³)	1" (25 mm)	4.3	(0.8)
	1 1/2" (38 mm)	6.5	(1.1)
	2" (51 mm)	8.7	(1.5)
6.0† (96 kg/m³)	1" (76 mm)	4.5	(0.8)
	1 1/2" (89 mm)	6.8	(1.2)
	2" (102 mm)	9.1	(1.6)

## THERMAL EFFICIENCY (ASTM C 177)



## GLASS MINERAL WOOL AND MOLD

Glass mineral wool insulation will not sustain mold growth. However, mold can grow on almost any material when it becomes wet and contaminated.

Carefully inspect any insulation that has been exposed to water. If it shows any sign of mold, it must be discarded. If the material is wet but shows no evidence of mold, it should be dried rapidly and thoroughly. If it shows signs of facing degradation from wetting, it should be replaced.

Air handling insulation used in the air stream must be discarded if exposed to water.

Check with your Manson Insulation Products Territory Manager to assure information is current.

MEAN TEMPERATURE	1.6 PCF		3.0 PCF		6.0 PCF	
	k	k (SI)	k	k (SI)	k	k (SI)
75°F (24°C)	0.24	0.035	0.23	0.033	0.22	0.032
100°F (38°C)	0.25	0.036	0.24	0.035	0.23	0.033
200°F (93°C)	0.33	0.048	0.29	0.042	0.27	0.039
300°F (149°C)	0.42	0.061	0.37	0.053	0.34	0.049

