



**AK Flex** pipe and tank insulation is a 48" wide semi-rigid glass mineral wool blanket, 2.5pcf density, in roll form. It is available faced with a factory-applied ASJ or FSK vapor retarder jacket. The fiber orientation provides excellent compressive strength while maintaining flexibility for ease of installation.

### USES

Manson AK FLEX pipe and tank insulation is typically used on tanks, vessels and large-diameter (greater than 10") pipes. It can be used for any curved or irregular surfaces that require finished characteristics of rigid glass mineral wool insulation.

### APPLICATIONS

For proper application of Manson AK Flex pipe and tank insulation simply follow these guidelines:

- Refer to the Stretch-out Chart to find the appropriate length to cut for the specific pipe size. Be sure to add an additional 2" (51mm) to 4" (102mm) for your staple flap.
- Cut your stretch-out length and wrap the material around the iron pipe to ensure the proper fit.

### 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, 6.0 PCF) (26, 36, 48, 96 kg/m<sup>3</sup>)
  - Type IA (3.0, 6.0 PCF) (48, 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 363-83-M

#### Corrosiveness (ASTM C 665)

- Will not accelerate corrosion of aluminum, steel or copper

#### Puncture Resistance (TAPPI Test T803) (Beach Units)

- FSK facings: 25
- ASJ facings: 50

### PRODUCT FEATURES

#### 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

CONTRACTOR:

JOB NAME:

DATE:

# AK FLEX

Glass Mineral Wool

Equipment, Pipe & Insulation

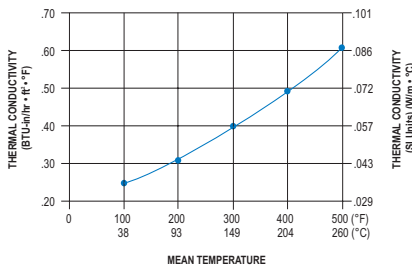
Temperature Limit: 850°F (454°C)



## STRETCH-OUTS Additional 2" (51 mm) to 4" should be added for lap.

Nominal Iron Pipe Size	Iron Pipe Outside Diameter	Thickness			
		1" (25 mm)	1 1/2" (38 mm)	2" (51 mm)	3" (76 mm)
10" (254 mm)	10 <sup>3/4</sup> " (273 mm)	40 <sup>1/8</sup> " (1019 mm)	43 <sup>1/4</sup> " (1099 mm)	46 <sup>3/8</sup> " (1178 mm)	52 <sup>5/8</sup> " (1337 mm)
12" (305 mm)	12 <sup>3/4</sup> " (324 mm)	46 <sup>3/8</sup> " (1178 mm)	49 <sup>1/2</sup> " (1257 mm)	52 <sup>3/4</sup> " (1340 mm)	59" (1499 mm)
14" (356 mm)	14" (356 mm)	50 <sup>3/8</sup> " (1280 mm)	53 <sup>1/2</sup> " (1359 mm)	56 <sup>5/8</sup> " (1438 mm)	62 <sup>7/8</sup> " (1597 mm)
16" (406 mm)	16" (406 mm)	56 <sup>5/8</sup> " (1438 mm)	59 <sup>3/4</sup> " (1518 mm)	62 <sup>7/8</sup> " (1597 mm)	69 <sup>1/8</sup> " (1756 mm)
18" (457 mm)	18" (457 mm)	62 <sup>7/8</sup> " (1597 mm)	66" (1676 mm)	69 <sup>1/4</sup> " (1756 mm)	75 <sup>1/2</sup> " (1918 mm)
20" (508 mm)	20" (508 mm)	69 <sup>1/8</sup> " (1756 mm)	72 <sup>3/8</sup> " (1838 mm)	75 <sup>1/2</sup> " (1918 mm)	81 <sup>3/4</sup> " (2076 mm)
22" (559 mm)	22" (559 mm)	75 <sup>1/2</sup> " (1918 mm)	78 <sup>5/8</sup> " (1997 mm)	81 <sup>3/4</sup> " (2076 mm)	88" (2235 mm)
24" (610 mm)	24" (610 mm)	81 <sup>3/4</sup> " (2076 mm)	84 <sup>7/8</sup> " (2156 mm)	88" (2235 mm)	94 <sup>3/8</sup> " (2397 mm)
26" (660 mm)	26" (660 mm)	88" (2235 mm)	91 <sup>1/8</sup> " (2315 mm)	94 <sup>3/8</sup> " (2397 mm)	100 <sup>5/8</sup> " (2556 mm)
28" (711 mm)	28" (711 mm)	94 <sup>3/8</sup> " (2397 mm)	97 <sup>1/2</sup> " (2477 mm)	100 <sup>5/8</sup> " (2556 mm)	106 <sup>7/8</sup> " (2715 mm)
30" (762 mm)	30" (762 mm)	100 <sup>5/8</sup> " (2556 mm)	103 <sup>3/4</sup> " (2635 mm)	106 <sup>7/8</sup> " (2715 mm)	113 <sup>1/8</sup> " (2873 mm)
32" (813 mm)	32" (813 mm)	106 <sup>7/8</sup> " (2715 mm)	110" (2794 mm)	113 <sup>1/8</sup> " (2873 mm)	119 <sup>1/2</sup> " (3035 mm)
34" (864 mm)	34" (864 mm)	113 <sup>1/8</sup> " (2873 mm)	116 <sup>1/4</sup> " (2953 mm)	119 <sup>1/2</sup> " (3035 mm)	125 <sup>3/4</sup> " (3194 mm)
36" (914 mm)	36" (914 mm)	119 <sup>1/2</sup> " (3035 mm)	122 <sup>5/8</sup> " (3115 mm)	125 <sup>3/4</sup> " (3194 mm)	132" (3353 mm)
38" (965 mm)	38" (965 mm)	125 <sup>3/4</sup> " (3194 mm)	128 <sup>7/8</sup> " (3273 mm)	132" (3353 mm)	138 <sup>1/4</sup> " (3512 mm)
40" (1016 mm)	40" (1016 mm)	132" (3353 mm)	135 <sup>1/8</sup> " (3432 mm)	138 <sup>1/4</sup> " (3512 mm)	144 <sup>5/8</sup> " (3673 mm)
42" (1067 mm)	42" (1067 mm)	138 <sup>1/4</sup> " (3512 mm)	141 <sup>1/2</sup> " (3594 mm)	144 <sup>5/8</sup> " (3673 mm)	150 <sup>7/8</sup> " (3832 mm)

### THERMAL EFFICIENCY (ASTM C 177)



MEAN TEMPERATURE	k	k (SI)
75°F (24°C)	0.24	0.035
100°F (38°C)	0.25	0.036
200°F (93°C)	0.32	0.046
300°F (149°C)	0.39	0.056
400°F (204°C)	0.49	0.070
500°F (260°C)	0.61	0.088

#### Excellent Thermal Properties

- Low thermal conductivity ratings to 850°F (454°C)

#### Low-Cost Installation

- Flexible
- Easy to handle and Fabricate

#### Inventory Savings

- No need to stock multiple sizes
- Various thickness available to meet all your pipe and tank insulation needs.

#### Resists Damage

- Tough and durable
- Resists damage in shipment as well as during and after installation

#### Resists Microbial Growth

- Does not promote the growth of fungi or bacteria
- Will not rot
- Will not sustain vermin

#### Non-Corrosive

- Will not accelerate the corrosion of aluminum, steel or copper

### 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 with organic materials. 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.

#### NOTES:

Manson AK Flex Pipe and Tank insulation on below ambient piping, vapor retarder mastic shall be applied to the ends at every fourth section joint and at each fitting before taping.

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