



**ALLEY-K®** pipe insulation is a preformed insulation product composed of high quality glass fibers, bonded together with a thermosetting resin. The 36" pipe sections are available with or without the All Service Jacket (ASJ). Our all service vapor retarder jacket (ASJ) reinforced with glass fibers comes with a factory applied pressure sensitive self-sealing lap closure system (SSL). Butt strips are also supplied.

## USES

**ALLEY-K®** pipe insulation is intended as a thermal insulation product for hot and cold service piping. Typical uses include domestic hot and cold water, hot water heating, high temperature, dual temperature, steam, condensate and refrigerated lines. As a component of a suitable insulation system, plain ALLEY-K® pipe insulation may be used for light industrial applications, while ALLEY-K® pipe insulation with ASJ jacket may be used for commercial and institutional usage.

## AVAILABILITY

Manufactured dimensions are listed in the Manson Insulation product catalog.

### SPECIFICATION COMPLIANCE

**ASTM C 547**

- Type I

**ASTM C 795****MIL-I-24244C****City of New York MEA 325-83-M****NRC Reg Guide 1.36****Jacketing**

- UL 723/ASTM E84
- CGSB 51-GP-52M
- ASTM C 1136 (Type I, II)
- Water Vapor Permeance (ASTM E-96): 0.02 perms MAX
- TAPPI T803 (Beach Units) Jacket minimum rating of 50 units

### PRODUCT FEATURES

**Greenguard Certification**

- Greenguard GOLD certified for superior indoor air quality performance.

**Linear Shrinkage**

- (ASTM C 356) Negligible

**Temperature Limitation (ASTM C 411)**

- Up to 850°F (454°C)

**Microbial Growth (ASTM C 1338)**

- Does not promote or support the growth of mold

**Alkalinity (ASTM C 871)**

- Less than 0.6% as Na<sub>2</sub>O
- pH between 7.5 and 12.0

**Corrosiveness (ASTM C 665)**

- No greater than sterile cotton

**Water Vapor Sorption (ASTM C 1104)**

- 0.2% or less by volume

CONTRACTOR:

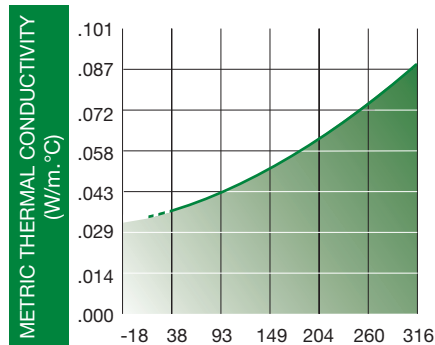
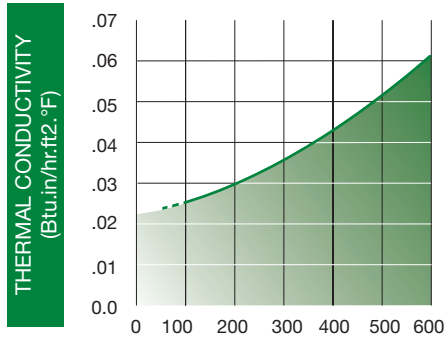
JOB NAME:

DATE:

# ALLEY-K®

## Fiberglass Pipe Insulation

0°F to 850°F (-18°C to 454°C)



THERMAL CONDUCTIVITY (ASTM C335)	MEAN TEMPERATURE		THERMAL CONDUCTIVITY	
	°F	°C	Btu.in/hr.ft².°F	W/m.°C
	75	24	0.23	0.033
100	38	0.24	0.035	
200	93	0.28	0.040	
300	149	0.34	0.049	
400	204	0.42	0.061	
500	260	0.51	0.074	
600	316	0.62	0.089	

### USAGE QUALIFICATIONS

1. Hot surface performance: tested to 850°F (454°C) according to ASTM C411.
2. A sufficient thickness of insulation must be used to keep maximum surface temperature of Alley-K® pipe insulation with ASJ jacket below 140°F (60°C).
3. At operating temperatures above 500°F (260°C), Alley-K® pipe insulation must be applied in a thickness ranging from 2" (51mm) min to 6" (152mm) max.
4. Due to the fact that binder is organic in nature, we recommend the following heat up schedule for operating temperatures from 500°F (260°C) to 850°F (454°C). (see table)
5. When pressure sensitive self-sealing tape and butt strips are used, the material must be stored in a clean, dry environment. When adhering SSL tape and butt strip, rub firmly with a hard object such as a plastic squeegee or back of a knife to assure good vapor seal.
6. Fibrous insulation can emit an acrid odour during the initial heat-up when applied to hot surfaces above 392°F (200°C). It is recommended that adequate ventilation be provided and /or workers be supplied with approved full face respirators.

FIRE HAZARD CLASSIFICATION	FLAME SPREAD	SMOKE DEVELOPED	
	Plain	25	50
	ASJ	25	50

HEAT UP SCHEDULE	TIME	TEMPERATURE @	TOTAL TIME
	3.5 hrs	550°F (288°C)	3.5 hrs
	2.5 hrs	650°F (343°C)	6 hrs
	2 hrs	750°F (399°C)	8 hrs

### INSTALLATION

Manson Alley-K® pipe insulation is usually applied in accordance with the procedure in the publication "Commercial & Industrial Standards" by the National Insulation Association.

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