



**ALLEY WRAP®** fiberglass blanket insulation is a thermal and acoustical insulation product made from highly resilient, inorganic glass fibers bonded by a thermosetting resin. It is available unfaced or with a multi-purpose foil-scrim kraft (FSK) jacket. Vapor retarders have a 2" (51 mm) stapling flange on one edge, and the factory-applied facing assures uniform quality.

## USES

Manson ALLEY-WRAP® is used as an external insulation on commercial or residential heating or air conditioning ducts. It is suitable for the exterior of rectangular or round sheet metal ducts and spaces, or surfaces where temperature and condensation must be controlled.

## AVAILABILITY

Manufactured dimensions are listed in the Manson Insulation product catalog.

### TECHNICAL DATA

#### Surface Burning Characteristics

- UL Classified, ULC Classified (Plain only).
- Unfaced or composite (insulation, facing and adhesive) does not exceed 25 Flame Spread, 50 Smoke Developed when tested in accordance with ASTM E 84, CAN/ULC S102-M88, NFPA 255 and UL 723.

#### Temperature Range (ASTM C 411)

- Faced, can be used on ducts operating up to 250°F (121°C).
- Unfaced, up to 350°F (177°C).

#### Water Vapor Permeance (ASTM E 96, Procedure A)

- FSK facings have maximum water vapor permeance of .02 perms.

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

- Less than 5% by weight when tested for 96 hours at 120°F (49°C) and 95% relative humidity.

#### Corrosiveness (ASTM C 665)

- Will not accelerate corrosion of a steel panel compared to sterile cotton.

#### Mold Growth (ASTM C 1338)

- No growth.

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

- FSK : 25

### SPECIFICATION COMPLIANCE

#### Canada

- CAN/ULC S102-M88
- CAN/CGSB 51.5M; Type II (FSK facing)
- CAN/CGSB 51.11-92

#### USA

- ASTM C 553; Type I, II, III
- ASTM C 1136; Type II
- ASTM C 1290

#### GREENGUARD Environmental Institute™

Children & Schools<sup>SM</sup> Certified for superior indoor air quality (IAQ) performance

California Title 24 (installed at 25% compression)  
HH-I-558C; Form B, Type I, Class 7  
NFPA 90A and 90B

CONTRACTOR:

JOB NAME:

DATE:

# ALLEY WRAP®

## Fiberglass Blanket Insulation

Temperature Limit: UNFACED : 350°F (177°C)  
FACED : 250°F (121°C)



ACOUSTICAL PERFORMANCE	INSERTION LOSS (Reduction of Sound Transmitted Through Duct Wall) <small>(Sound and Vibration Design and Analysis, National Environmental Balancing Bureau, 1994)</small>													
			DUCT WRAP				INSERTION LOSS, dB							
	DUCT DIMENSIONS		SHEET METAL	NOMINAL THICKNESS		NOMINAL DENSITY		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz
	12" x 12"	(305 mm x 305 mm)	24 GA	1.5"	(38 mm)	0.75 PCF	(12kg/m <sup>3</sup> )	0.6	0.6	0.6	0.7	7.4	14.2	20.9
	24" x 12"	(610 mm x 305 mm)	24 GA	1.5"	(38 mm)	0.75 PCF	(12kg/m <sup>3</sup> )	0.6	0.6	0.6	0.7	7.4	14.2	20.9
	48" x 12"	(1219 mm x 305 mm)	22 GA	1.5"	(38 mm)	0.75 PCF	(12kg/m <sup>3</sup> )	0.6	0.5	0.5	0.6	7.4	14.1	20.9
	24" x 24"	(610 mm x 610 mm)	22 GA	1.5"	(38 mm)	0.75 PCF	(12kg/m <sup>3</sup> )	0.6	0.5	0.5	0.6	7.4	14.1	20.9
	24" x 12"	(610 mm x 305 mm)	26 GA	1.5"	(38 mm)	0.75 PCF	(12kg/m <sup>3</sup> )	0.8	0.8	0.8	0.8	7.5	14.2	21.0
	24" x 8"	(610 mm x 203 mm)	26 GA	2"	(51 mm)	0.75 PCF	(12kg/m <sup>3</sup> )	1.0	1.0	1.0	3.6	10.4	17.1	23.9

THERMAL PERFORMANCE (ASTM C 177)	THERMAL EFFICIENCY							
	MEAN TEMPERATURE	0.75 PCF (12kg/m <sup>3</sup> )		1.0 PCF (16kg/m <sup>3</sup> )		1.5 PCF (24kg/m <sup>3</sup> )		
		k	k (SI)	k	k (SI)	k	k (SI)	
50°F (10°C)	0.28	0.040	0.26	0.037	0.23	0.033		
75°F (24°C)	0.29	0.042	0.27	0.039	0.24	0.035		
100°F (38°C)	0.31	0.045	0.29	0.042	0.26	0.037		
125°F (52°C)	0.33	0.048	0.31	0.045	0.28	0.040		
150°F (66°C)	0.36	0.052	0.34	0.049	0.31	0.045		
175°F (80°C)	0.39	0.056	0.37	0.053	0.33	0.048		
200°F (93°C)	0.43	0.063	0.40	0.058	0.36	0.052		

## FIBERGLASS AND MOLD

Fiberglass 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.

## INSTALLATION PROCEDURES

Manson ALLEY-WRAP® blanket insulation is usually applied in accordance with the procedure in the publication "Commercial & Industrial Standards" by the National Insulation Association (NIA).

Manson Insulation Products Ltd. has no control over installation design, installation workmanship, accessory materials, or conditions of application. Manson does not warrant the performance or results of any installation containing their products. This warranty disclaimer includes all implied warranties, including the warranties of merchantability and fitness for a particular purpose.

## NOTES

The chemical physical properties of Manson Alley-Wrap® blanket insulation represent typical average values determined in accordance with accepted test methods. The data is subject to normal manufacturing and testing variations. The data is supplied as a technical service and is subject to change without notice.

References to numerical flame spread ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

Check with your Manson sales representative to assure information is current.