



**AKOUSTI-LINER R®** is a rigid duct liner that provides both thermal and acoustical insulation. It is manufactured from flame attenuated glass fibres that are bonded with a thermosetting binder. The air stream surface is faced with a rigid black coated mat bonded to the fibreglass substrate.

### USES

AKOUSTI-LINER R® is a premium, extra durable rigid liner for use on flat duct surfaces. Some typical applications include fan plenums and air distribution ducting on industrial and commercial heating, ventilating and air-conditioning systems.

### AVAILABILITY

Manufactured dimensions are listed below. Please check with your market manager for information on other thicknesses, widths, and lengths.

THICKNESS		WIDTH		LENGTH	
5/8"	16 mm	24", 48"	610 mm, 1219 mm	48", 96"	610 mm, 2438 mm
1"	25 mm	24", 48"	610 mm, 1219 mm	48", 96"	610 mm, 2438 mm
1½"	38 mm	24", 48"	610 mm, 1219 mm	48", 96"	610 mm, 2438 mm
2"	51 mm	24", 48"	610 mm, 1219 mm	48", 96"	610 mm, 2438 mm

### PRODUCT FEATURES

**WATER ABSORPTION** (ASTM C1104) Less than 1% by volume

**ODOUR EMISSION** (ASTM C1304) Absence of any detectable odour

**CORROSION RESISTANCE** (ASTM C665)

Will not cause or accelerate corrosion of steel, copper, aluminum or zinc

**AIR FLOW CHARACTERISTICS** (UL 181 Air Erosion Test)

Air velocity rating 5,000 ft/min (25.4 m/s)

Air erosion rating 12,500 ft/min (63.5 m/s)

**BACTERIA FUNGI RESISTANCE** (ASTM 665)

Does not breed or promote growth

**ALKALINITY AND pH**

(CGSB-51-GP-10M) Maximum alkalinity 0.5% (Na2O), pH maximum: 12

**LINEAR SHRINKAGE** (ASTM C356) Less than 1.5%

**CONTRACTOR:**

**JOB NAME:**

**DATE:**

**Manson Insulation Inc.**

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# AKOUSTI-LINER R®

Fiberglass Duct Liner Insulation

Temperature Limit: 250°F (121°C)



## SPECIFICATION COMPLIANCE

### FIRE HAZARD CLASSIFICATION

(UL 723, CAN/ULC-S102M, ASTM E84)

Flame spread not exceeding 25 and Smoke Developed not exceeding 50

### NFPA 90B

Standard for the Installation of Warm Air Heating and Air-Conditioning Systems

### ASTM C1071

Standard specification for Thermal and Acoustical Insulation (Glass, Fibre, Duct Lining Material)

### SMOKE OPACITY AND FLAME SPREAD

(ASTM E662, ASTM E162)

Exceeds requirement for optical opacity of smoke generated and flame spread, as per Department of Transportation, Urban Mass Transit Division

### CGSB 51-GP-10M

Canadian specification for mineral fibre board insulation

AKOUSTI-LINER R® is approved by the Canadian Coast Guard for use in Canadian registered ships.

### NFPA 90A

Standard for the Installation of Air-Conditioning and Ventilating Systems

ACOUSTICAL PERFORMANCE (ASTM C423 • A MOUNTING)	THICKNESS		FREQUENCY (Hz)						
	in	mm	125	250	500	1000	2000	4000	NRC
	5/8"	16	0.03	0.14	0.40	0.70	0.85	0.96	0.50
1"	25	0.07	0.30	0.72	0.96	1.04	1.05	0.75	
1½"	38	0.21	0.64	1.13	1.15	1.09	1.11	1.00	
2"	51	0.23	0.80	1.16	1.13	1.09	1.09	1.05	

THERMAL PERFORMANCE (ASTM C518)	THICKNESS		K-VALUE		C-VALUE		R-VALUE	
	in	mm	Btu.in/hr ft².°F	W/m.°C	Btu/hr ft².°F	W/m².°C	hr.ft².°F/ Btu	m².°C/W
	5/8"	16	0.22	0.032	0.35	2.00	2.8	0.50
1"	25.4	0.22	0.032	0.22	1.25	4.5	0.80	
1½"	38	0.22	0.032	0.15	0.83	6.8	1.20	
2"	51	0.22	0.032	0.11	0.62	9.1	1.60	

Tested in accordance with ASTM C518 at 75°F (24°C) mean temperature.

## INSTALLATION

All duct liner shall be installed in accordance with the requirement of the NAIMA Fibrous Glass Duct Liner Standard or SMACNA HVAC Duct Construction Standard and the project specification. Liner shall be adhered using adhesive (complying with ASTM C916) and mechanical fastener.

## LIMITATION

Duct liner should be kept clean and dry during shipping, storage, installation and system operation.

*Manson Insulation Inc. 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.*



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