

# AEROFLEX®

## Closed Cell Elastomeric Thermal Insulation (made from E.P.D.M. - Ethylene Propylene Diene Monomer)

Aeroflex Tube and Sheet Insulation is a flexible, closed cell and lightweight elastomeric material designed for insulating cooling and heating lines. The closed cell structure of Aeroflex provides many advantages over most rigid insulations for cooling and heating lines such as:

- Moisture & vapour resistance without using additional vapour barriers.
- Stable thermal conductivity (K. value) during service due to its dense surface skins and closed cell characteristics.
- Flexible which makes installation work easy and neat.
- Outstanding ultraviolet and weather resistance.

Aeroflex prevents heat gain and condensation problems on chilled water and refrigerant pipelines and also prevents heat loss from hot water plumbing, liquid and dual temperature piping. It is also an ideal insulation for frost control on cold water plumbing.

### Aeroflex Tube Insulation

Aeroflex Closed Cell Tube Insulation is easily installed to pipe or tubing. The factory-applied coating of talcum powder on the thick and smooth inner skin helps facilitate and speed up pre-assembly lines. When applied to existing lines, tubing should be slit length-wise and snapped into place. Slitting can be done on the job easily with razors, blades, knives or shears. Cut edges and joints can be sealed with Aeroseal Adhesive (neoprene base contact cement)

### Aeroflex Standard Sheet

The standard sheet is available in sizes of 0.91m x 1.2m with the wall thickness from 6mm upto 25mm. It prevents heat loss and condensation on large pipelines, tanks, chillers, air ducts and other irregular shaped vessels.

### Aeroflex Continuous Sheet Roll

Aeroflex sheet insulations are also available in continuous roll form. Continuous sheet rolls are available from 10mm to 50mm thickness at 1 metre wide and 3 to 30 metres long. All insulation sheets are made from the same materials as Aeroflex tubing.

### Temperature Range

Aeroflex tubes and sheet insulate and prevent condensation when used in operating temperatures down to  $-57^{\circ}\text{C}$  and insulate against heat loss upto  $125^{\circ}\text{C}$ . The thermal efficiency and water vapour permeability of Aeroflex will not be affected within these recommended operating temperature ranges.

### Moisture Resistance

The Closed Cell Structure protects against moisture and eliminates the need for a vapour barrier in most applications. However, under severe conditions of high humidity (90% RH and above), high temperature ( $32^{\circ}\text{C}$  and above) and low ventilation such as underground piping, "Aerocoat" (Acrylic Emulsion Paint) is recommended for use as an additional vapour barrier coating.

### Thermal Efficiency

Aeroflex Insulation is made from high quality synthetic elastomers, has low density and a closed cell structure. The products, therefore have a stable low K Factor of 0.25 – 0.27 (at  $10 - 32^{\circ}\text{C}$  mean temperature) which can save energy consumption on any heating and cooling lines.



# AEROFLEX

## Fire Rating

Aeroflex to Australian Standard AS1530.3 - 1999

Ignitability Index - 0 (range 0 – 20)

Spread of Flame Index - 0 (range 0 – 10)

Heat Evolved Index - 0 (range 0 – 10)

Smoke Developed Index - 3 (range 0 – 10)

To be read in conjunction with the Building Code of Australia.

## Anti Vibration and Resonance

The high elasticity of Aeroflex insulation minimizes the vibrations and resonance of chilled water and hot water pipelines during operation.

## Neat Appearance

The flexibility and smooth surface of Aeroflex offers a neat-finished appearance even at joints, tees and elbows. No decorative or protective coating is required for either indoor or outdoor installations.

## Flexibility and Space Saving

The flexibility of Aeroflex enables quick and easy installation on bent or irregular piping. Due to its low and stable thermal conductivity, Aeroflex requires a thinner wall than other rigid insulations. Therefore, less space is needed for Aeroflex.

## Other Advantages

Aeroflex can be safely handled without causing skin irritations or health hazard. It has superior resistance to fungus growth, vermin or rodent attack and other chemicals such as acids or alkalis. This makes Aeroflex ideal for protecting piping from corrosion caused by atmospheric agents and industrial ambience. Aeroflex is cured through a special vulcanisation process that will prevent any corrosion to metals. This means stainless & copper pipes will not become discoloured or brittle.

## Specifications

Average Physical Properties *	Aeroflex Insulation						Test Method **
Cell Structure	Closed Cell						-
Density (gm/cm <sup>3</sup> )	0.06 - 0.10 ***						ASTM D 1667
Thermal Conductivity	Temp (°C)	-20	0	24	32	40	ASTM C 177 JIS A 1412 – 1989 DIN 52613
	K Value (W/m.K)	0.034	0.035	0.038	0.039	0.040	
Service Temperature Limit ****	-57 °C to 125 °C						
Water Vapour Permeability (Kg/m.s.Pa)	0.15 perm – in. (0.22 x 10 <sup>-12</sup> )						ASTM C 355, E 96 *****
	μ ≥ 4,000						DIN 52615
Water Absorption (% by Weight)	3						ASTM D 1056
Ozone Resistance	Excellent						ASTM D 1171, D 1149
Thermal Stability (% shrinkage)	7 days 93 °C	5					ASTM C 534
	7 days 104 °C	6					
Flammability and Smoke Density *****	Self-extinguishing						ASTM D 635
	Class V 0						UL – 94
	Class 5.3						EMPA *****
	Non-Flammable						JIS K 6911
Weather and Ultraviolet Resistance	Good						-
Copper Corrosion	Negligible						-
Odour	Negligible						-
Flexibility	Excellent						-
Elongation	Excellent						-

**Note:** \* The physical properties of Aeroflex Closed Cell Insulation represent typical average values obtained in accordance with accepted test methods.

\*\* Also tested by other standards: DIN, JIS, SISIR and others.

\*\*\* For thicknesses ranging from 25mm and above, density 0.05 – 0.08 gm/cm<sup>3</sup>.

\*\*\*\* At –57 °C Aeroflex Closed Cell Insulation becomes harder and as temperature drops below –57 °C it becomes increasingly brittle. However this hardening characteristic does not affect thermal efficiency and water vapour permeability. On the heating cycle, Aeroflex Closed Cell Insulation will withstand temperatures up to 125 °C. For butt joint and seams contacted with Aeroseal Adhesive, the limited temperature is up to 100 °C.

\*\*\*\*\* Water vapour permeability of Aeroflex insulation is tested according to ASTM E 96 procedure E-Desiccant method at 37.8 °C.

\*\*\*\*\* Aeroflex Closed Cell Insulation is made of specially compounded elastomeric materials for self-extinguishing. The flammability of this insulation has been tested by exposing samples of 6" x 2" x ½" thickness to the procedures of ASTM D 635 test method entitled "Flammability of Plastics and Cellular Plastics". During this test, the sample is positioned horizontally. And for the procedure of UL – 94 the sample size of ½" x ½" x 5" is positioned vertically. This test method is not intended as a criterion of fire hazard. It can be of considerable value in comparing flammability to different materials.

\*\*\*\*\* EMPA: Swiss Federal Laboratories for Materials Testing and Research.

# AEROFLEX

## Accessories

### Aeroseal

Aeroseal is a Modified Neoprene Contact Adhesive specially formulated for bonding Aeroflex Insulation Materials firmly together. Also ideal for use with other materials such as Metal (painted or unpainted), Cork Board, Polyurethane Foam, Rigid PVC Sheet, Formica, Melamine Board or Rubber Sheet. The high water vapour resistance and good weathering resistance of Aeroseal can prevent water or moisture from penetrating the joints. Aeroseal forms a strong, firm and permanent bond between the applied materials providing long lasting service.



### Aerotape

Aerotape is a flexible and self-adhesive insulation foam tape, which is made from the same elastomeric material as Aeroflex Closed Cell Insulation. Ideal for wrapping hot or cold piping and fittings. Energy efficient and very easy to use. Excellent for preventing condensation problems. Designed specially for retarding heat loss in hot piping and preventing heat gain or frost formation on cold, chilled water piping or refrigeration lines. Adheres firmly to all metals. No problem of delamination. Aerotape is specially coated with primer on the non-adhesive side for a long service life.



### Airtape

Airtape Insulation Cork Tape is specially designed for all types of climates. It insulates cold pipes for all kinds of air conditioners used in cars and homes, freezers and refrigerators. Helps stop condensation problems. Ideal for retarding heat gained in cold pipes and preventing heat loss in hot pipes. Airtape Insulation Tape is an effective sound dampening material and can also be used for gasketing purposes. Airtape Insulation Tape sticks to all kinds of dry metals. It seals tightly without drying. It is flexible and will not shrink or melt within the service temperature of  $-29^{\circ}\text{C}$  to  $93^{\circ}\text{C}$ .



### Aerocoat

Aerocoat is a water-based paint formulated with selected pure acrylic emulsion mixed with other special chemicals. Excellent for coating onto Aeroflex insulation surfaces giving greater protection against ultraviolet rays or other adverse weather conditions. Available in shades of white, blue, green, yellow, red and black. Aerocoat can also be painted onto pipe insulation surfaces for easy identification of the different pipe functions.



### Protape

Protape is an EPDM-based self-adhesive tape, specially made for adhering the joints of Aeroflex tubes and sheets. Protape provides extra holding strength to the joints and serves as a vapour barrier to prevent atmospheric moisture to penetrate the seams. It is flexible, easy to wrap or patch tightly to the insulation surface.



### Aerofix

Aerofix is a polymeric rigid foam Pipe Hanger with a foam tape inner lining, that absorbs vibration of operating pipes. The outer covering consists of a special rubber tape that seals the hanger completely after installation to prevent moisture penetration. Its strong closed cell structure is ideal for insulating hangers especially for cooling pipes to prevent condensation and save energy.



### Aerostand

Aerostand is made from natural rubber blended with EPDM synthetic rubber and is a load support specifically designed for air-conditioning units. This stand possesses both high compressive strength and good weathering resistance. It is very effective in reducing vibration and noise levels. Aerostand can withstand loads of upto 50kgs per piece.



#### Aerostand Specifications

**Tensile Strength :** Minimum 6.5 MPa

**Elongation :** Minimum 250%

**Hardness :**  $70 \pm 5$  Shore A

**Compression Strength @ 10% Deflection :** Minimum  $0.75 \text{ N/mm}^2$

**Maximum Compression Strength :** Minimum  $5.0 \text{ N/mm}^2$

**Tear Strength :** Minimum 15 kgf/cm

# AEROFLEX

## Closed Cell Pipe Insulation

### 6mm & 9mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M06006	6	6	180	\$2.89
M06008		8	160	\$3.08
M06010		10	140	\$3.22
M06013		13	110	\$4.52
M06016		16	80	\$5.24
M06019		19	70	\$5.61
M06022		22	70	\$5.92
M06025		25	60	P.O.A.
M06028		28	50	P.O.A.
M09006		9	6	132
M09010	10		110	\$3.39
M09013	13		84	\$4.54
M09016	16		70	\$4.95
M09019	19		60	\$5.54
M09022	22		54	\$6.24
M09025	25		44	\$6.53
M09028	28		36	\$6.84
M09032	32		34	\$8.24
M09035	35		32	\$8.54
M09038	38		30	\$10.03
M09042	42		28	\$11.56
M09045	45		24	\$11.59
M09048	48		20	\$13.86
M09051	51		18	\$14.25
M09054	54		18	\$14.52
M09060	60		16	\$16.53
M09064	64		16	P.O.A.
M09067	67		14	\$18.17
M09073	73		10	P.O.A.
M09076	76	10	\$20.02	
M09080	80	10	\$20.39	
M09083	83	10	\$20.56	

### 13mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M13006	13	6	80	\$5.28
M13010		10	70	\$5.43
M13013		13	60	\$5.58
M13016		16	50	\$6.01
M13019		19	40	\$6.24
M13022		22	32	\$6.48
M13025		25	30	\$7.32
M13028		28	28	\$7.46
M13032		32	24	\$11.83
M13035		35	20	\$12.40
M13038		38	18	\$14.78
M13042		42	18	\$16.56
M13045		45	18	\$17.72
M13048		48	16	\$19.61
M13051	51	14	\$20.10	
M13054	54	14	\$20.70	
M13060	60	12	\$21.91	
M13064	64	10	\$23.36	
M13067	67	10	\$24.84	
M13073	73	10	P.O.A.	
M13076	76	8	\$30.09	
M13080	80	8	\$30.62	
M13083	83	8	P.O.A.	
M13090	90	8	\$34.20	
M13092	92	8	\$36.55	
M13098	98	6	P.O.A.	
M13102	102	6	\$38.27	
M13105	105	6	\$41.27	
M13115	115	6	\$42.42	
M13127	127	4	P.O.A.	
M13130	130	4	P.O.A.	
M13140	140	4	\$48.36	

### 19mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M19006	19	6	32	\$10.10
M19010		10	32	\$11.24
M19013		13	32	\$11.83
M19016		16	28	\$13.48
M19019		19	24	\$14.03
M19022		22	20	\$16.29
M19025		25	18	\$17.46
M19028		28	18	\$18.02
M19032		32	18	\$19.64
M19035		35	16	\$22.41
M19038		38	12	\$24.76
M19042		42	12	\$27.19
M19045		45	10	\$28.95
M19048		48	8	\$30.62
M19051	51	8	\$32.42	
M19054	54	8	\$32.97	
M19060	60	8	\$35.35	
M19064	64	8	\$37.19	
M19067	67	8	\$38.95	
M19073	73	6	\$47.19	
M19076	76	6	\$48.98	
M19080	80	6	\$50.73	
M19083	83	6	P.O.A.	
M19090	90	6	\$54.24	
M19092	92	6	P.O.A.	
M19098	98	4	P.O.A.	
M19102	102	4	\$64.31	
M19105	105	4	\$64.91	
M19115	115	4	\$80.81	
M19127	127	4	\$82.60	
M19130	130	4	P.O.A.	
M19140	140	4	\$88.47	

**Fire Rating:** Aeroflex Insulation is tested to Australian Standards 1530.3 - 1999

Ignitability: - 0

Spread of Flame: - 0

Heat Evolved: - 0

Smoke Developed: - 3

# AEROFLEX

## Closed Cell Pipe Insulation

### 25mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M25006	25	6	24	\$14.59
M25010		10	20	\$15.18
M25013		13	18	\$15.75
M25016		16	18	\$16.86
M25019		19	18	\$19.11
M25022		22	16	\$21.42
M25025		25	12	\$23.07
M25028		28	12	\$24.76
M25032		32	10	\$25.88
M25035		35	10	\$27.49
M25038		38	8	\$29.18
M25042		42	8	\$34.24
M25045		45	8	P.O.A.
M25048		48	8	\$40.44
M25051		51	8	\$42.13
M25054		54	8	\$44.90
M25060		60	6	\$47.19
M25064		64	6	\$48.81
M25067		67	6	\$50.53
M25073		73	6	\$56.16
M25076		76	6	\$58.96
M25080		80	6	\$61.78
M25083		83	6	P.O.A.
M25086		86	4	\$66.01
M25090		90	4	\$67.40
M25092	92	4	P.O.A.	
M25098	98	4	P.O.A.	
M25102	102	4	\$77.41	
M25105	105	4	P.O.A.	
M25115	115	4	\$89.87	
M25127	127	4	\$109.55	
M25130	130	2	P.O.A.	
M25140	140	2	\$101.08	
M25152	152	2	\$110.28	

### 32mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M32016	32	16	14	P.O.A.
M32019		19	14	P.O.A.
M32022		22	12	P.O.A.
M32025		25	10	P.O.A.
M32028		28	8	\$34.83
M32032		32	8	P.O.A.
M32035		35	8	P.O.A.
M32038		38	8	P.O.A.
M32042		42	8	P.O.A.
M32045		45	8	P.O.A.
M32048		48	6	P.O.A.
M32051		51	6	P.O.A.
M32054		54	6	\$61.78
M32060		60	4	\$67.40
M32064		64	4	\$70.18
M32067		67	4	\$72.99
M32073		73	4	\$78.61
M32076		76	4	\$81.70
M32080		80	4	\$84.23
M32083		83	4	\$87.02
M32090		90	4	\$89.87
M32092		92	4	\$92.66
M32098		98	2	\$97.91
M32102		102	2	\$99.50
M32105		105	2	\$101.08
M32115	115	2	\$112.31	
M32127	127	2	\$115.28	
M32130	130	2	\$119.35	
M32140	140	2	P.O.A.	
M32165	165	2	\$127.56	

### 38mm Wall

Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M38013	38	13	8	\$29.77
M38016		16	8	\$33.25
M38019		19	8	\$35.54
M38022		22	8	\$44.90
M38025		25	8	\$50.53
M38028		28	8	\$56.16
M38032		32	8	\$59.32
M38035		35	6	\$64.59
M38038		38	6	\$68.78
M38042		42	6	\$72.99
M38045		45	6	\$75.80
M38048		48	6	\$78.61
M38051		51	4	\$89.80
M38054		54	4	\$95.48
M38060		60	4	\$101.08
M38064		64	4	\$103.87
M38067		67	4	\$106.69
M38073		73	3	\$112.31
M38076		76	3	\$115.75
M38080		80	3	\$123.56
M38083		83	3	\$126.31
M38090		90	3	\$129.16
M38092		92	3	\$134.77
M38098		98	3	\$138.47
M38102		102	2	\$161.70
M38105	105	2	\$146.03	
M38115	115	2	\$157.23	
M38127	127	2	\$159.31	
M38130	130	2	\$162.77	
M38140	140	2	\$168.48	
M38165	165	2	\$174.90	

**Fire Rating:** Aeroflex Insulation is tested to Australian Standards 1530.3 - 1999

Ignitability: - 0

Spread of Flame: - 0

Heat Evolved: - 0

Smoke Developed: - 3



AIREFRIG AUSTRALIA PTY LTD  
RECOMMENDED LIST PRICES  
A.B.N. 95 008 761 573

ALL PRICES ARE EXCLUSIVE OF GST  
SUBJECT TO CHANGE WITHOUT NOTICE  
EFFECTIVE JANUARY 2009

# AEROFLEX

## Closed Cell Pipe & Sheet Insulation

### 50mm Wall

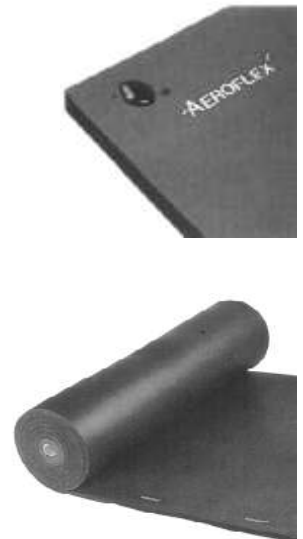
Airefrig Part Number	Wall mm	ID mm	Lengths per Carton	List Price Ex GST
M50022	50	22	4	\$97.78
M50025		25	4	\$102.12
M50028		28	4	\$106.99
M50032		32	4	\$109.59
M50035		35	4	\$111.79
M50038		38	4	\$114.00
M50042		42	4	\$116.67
M50045		45	4	\$125.61
M50048		48	3	\$131.35
M50051		51	3	\$139.22
M50054		54	3	\$147.75
M50060		60	3	\$158.48
M50064		64	3	\$160.82
M50067		67	3	\$163.02
M50073		73	2	\$177.56
M50076		76	2	\$183.95
M50080		80	2	\$198.70
M50083		83	2	\$205.98
M50090		90	2	\$219.78
M50092		92	2	\$223.59
M50098		98	2	\$227.99
M50102		102	2	\$232.39
M50105		105	2	\$242.74
M50115		115	2	\$265.74
M50127		127	2	\$273.81
M50130		130	2	\$277.28
M50140	140	2	\$283.15	
M50153	153	2	\$288.49	
M50165	165	1	\$293.82	

### Flat Sheet

Airefrig Part Number	Thickness mm	Sheets per Carton	List Price Excl GST
P5802	1.2mtr x .91mtr x 6mm	24	\$31.80
P5803	1.2mtr x .91mtr x 9mm	16	\$39.05
P5804	1.2mtr x .91mtr x 13mm	12	\$52.91
P5806	1.2mtr x .91mtr x 20mm	8	\$77.51
P5808	1.2mtr x .91mtr x 25mm	6	\$105.19

### Sheet Rolls

Airefrig Part Number	Thickness mm	Roll Sizes Metres	List Price Excl GST
MSR10	10	1 x 15	\$531.10
MSR13	13	1 x 11	\$527.41
MSR20	20	1 x 7	\$491.61
MSR25	25	1 x 5	\$476.53
MSR32	32	1 x 4	\$569.44
MSR50	50	1 x 2	\$442.66



### Dimension Tolerances

ID Size	Wall 6mm	Wall 9mm	Wall 13mm	Wall 19mm	Wall 25mm	Wall 32mm	Wall 38mm	Wall 50mm
9 to 28 mm	6 ± 1 mm	9.6 ± 1 mm	12.6 ± 1 mm	19 ± 1 mm	25 ± 1 mm	32 ± 2 mm	38 ± 2 mm	38 ± 2 mm
32 to 83 mm		10.6 ± 1 mm	13.6 ± 1 mm	20 ± 1 mm	26 ± 1 mm	33 ± 2 mm	39 ± 2 mm	39 ± 2 mm
90 to 140 mm		11.5 ± 1 mm	14.5 ± 1 mm	21 ± 1 mm	27 ± 1 mm	34 ± 2 mm	40 ± 2 mm	40 ± 2 mm

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Heat Evolved: - 0

Smoke Developed: - 3

# AEROFLEX

## Tapes – Paints – Anti-Vibration

### Tapes

Airefrig Part Number	Description	List Price Excl GST
AEROTAPE	Aerotape Foam Tape 50mm x 9.0 Mtr	\$23.27
AIRTAPE	Everseal Cork Tape 50mm x 9.0 Mtr	\$22.50
PROTAPE25MM	Tape 25mm x 0.6mm x 25 Mtr	\$30.39
PROTAPE50MM	Tape 50mm x 0.6mm x 25 Mtr	\$59.72
ALUTAPE63	Foil Tape 63mm x 45 Mtr	\$18.70
ALUTAPE75	Foil Tape 75mm x 45 Mtr	\$27.07
VAPASTOP	Ali Reinforced Tape 72mm x 50 Mtr	\$81.79



### Adhesive and Paints

Airefrig Part Number	Description	List Price Excl GST
AA2M	Aeroseal Adhesive & Brush 200 MI	\$19.94
AA7M	Aeroseal Adhesive 700 MI	\$38.85
AEROCOAT4L	Aerocoat Plastic Paint Black 3.8 Ltr	\$372.56
AEROCOATBLK	Aerocoat Plastic Paint Black 950 MI	\$110.07
AEROCOATBLU	Aerocoat Plastic Paint Blue 950 MI	\$110.72
AEROCOATGRN	Aerocoat Plastic Paint Green 950 MI	\$110.07
AEROCOATRED	Aerocoat Plastic Paint Red 950 MI	\$110.07
AEROCOATWHT	Aerocoat Plastic Paint White 950 MI	\$110.07
AEROCOATYEL	Aerocoat Plastic Paint Yellow 950 MI	\$110.07



### Anti-Vibration

Airefrig Part Number	Description	List Price Excl GST
AEROPAD10	Anti Vibration Pad 1000mm x 100mm x 10mm	\$23.77
AEROPAD15	Anti Vibration Pad 1000mm x 100mm x 15mm	\$35.72
AEROSTAND075	Machinery Mount 75mm High Max Load 50Kg per stand (set of 4)	\$20.22
TDRAMS201520	Stud Mount 20x15x20mm M8 (set of 4)	\$28.60



TDRAMS201520



AEROPAD



AEROSTAND075