This material can be freely cut in construction according to the shape required, mainly used in room, noise-reducing system, transportation, refrigerating system and household electric appliances etc.

The glass wool blankets with aluminum foil surface has good capability of heat radiation protection which is suitable for high temperature area, control room, inner wall of the working shop and so on.

Density: 10~32 kg/m<sup>3</sup> Thickness: 25~180mm Length: 6m~30m Width: 1.2m

Foil clad: reinforced aluminum foil

perforated aluminum foil

For special specification, please contact us.





### **Glass Wool Board**

Glass wool board has excellent thermal isolation performance at both high and low temperature environment. It is mainly used for the separating wall in the high grade building, ceiling, air conduit or inner wall of bellows for thermal isolating, machine shops for noise absorption or metal ceiling for moisture control. High density panels with laminated facing can be used for air-conditioning duct system.

Density: 24~96 kg/m³
Thickness: 20~150mm
Length: 600mm~2400mm
Width: 600mm~1200mm

Foil clad: reinforced aluminum foil

perforated aluminum foil

For special specification, please contact us.





### **Glass Wool Pipe**

As this material has the characters of water-proof and anti-corrosion which is good in stopping condensation and freezing of the pipes. It is widely used in buildings, heating power pipes, air conditioning and refrigerators for thermal isolating such as hot water and steam pipes, electric power, petroleum, chemical industries.

Aluminum foil facing can be applied for preventing moisture and for radiation protection.

Density: 30~100 kg/m<sup>3</sup> Length: 1000mm Width: 30mm~100mm

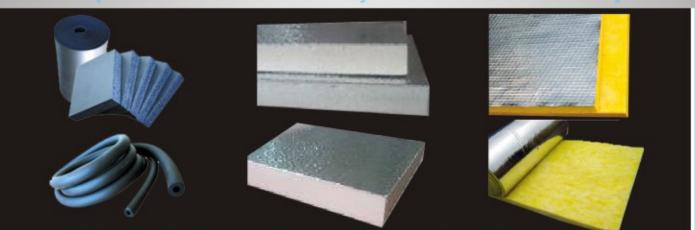
Inner diameter: Ø22mm~Ø1220mm

For special specification, please contact us.

# INSULATION



[Your satisfaction is always our cherished desire!]



The models and specifications of equipment listed in this catalog shall be subject to change without any prior notification due to product up

AIRTROJAN INC.

www.airtrojan.com



### **Elastomeric Rubber Foam**

Rubber foam insulations are engineered and manufactured for HVAC and other industrial applications. With closed cell structure they effectively retard heat flow and prevent condensation when properly installed. The environmental friendly materials are manufactured without the use of CFC's, HFC's or HCFC's. They are also formaldehyde free, low VOCs, fiber free, duct free and resistant to mildew.

### Specification

ltem		Unit	Specification				
			K0	k1	k2	Standard	
Density		kg/m³	48~96			ASTM D1622 or D1667	
Temperature range		°C	-183~105				
Thermal conductivity	24°C	W/(m • k)	0.039		0.04	A CTM C477 CE40	
	32°C	W/(m • k)	0.04		0.041	ASTM C177 or C518	
Water vapor permeability		kg/(m.s.pa)	1.16 x 10 <sup>-13</sup>		1.5 x 10 <sup>-13</sup>	ASTM E96 Procedure A DIN 52615	
Flame spread and smoke developed index			Class 1 & Class 0	Class 1		BS 476 part 7 & part 6	
			V0		UL94		
Water absorption, by volume		%	0.2			ASTM C209	
Mold growth			meet requirement			UL181	
Bacterial resistance			meet requirement			ASTM G22	
Fungi resistance			meet requirement			ASTM G21/C1338	
Resistance to agent chemical			Stable performance to agent chemical				
Anti-ozone			Not cracking			ASTM D1149	
Aging resistance			150 hours, single wrinkles, no cracks, holes or distortion				
Wall thickness (normal)	Tube		9,13,19,25,32,40,50	6,9,13,19,25,32,40,50	6,9,13,19		
	Sheet	mm	3,6,9,13,16,19,25,32,40,50				
Tube inner diameter, tubular form		in	1/4" to 6"		1/4" to 2"		
Length	Tube		6' or 2m				
	Sheet	m	0.915				
	Roll	m	2.5,3,4,6,7,8,10,15,30				
Width	Sheet	m	1,1.22				
	Roll	m			-		

For application below -50°C please contact us before ordering.

### Applications:

For retard heat transmission and control condensation from chilled water and refrigeration systems. It also efficiently reduces heat transfer for hot-water plumbing, liquid-heating and dual-temperature piping.

It is extremely ideal for

Ductwork

Dual temperature and low pressure steam lines

Process piping

Air-conditioner, including hot gas piping



Special glue



Rubber foam



## INSULATION

### Pre-insulated Ducting Panel







### Polyurethane (PU)

Airtrojan zero ODP insulation panels comprise rigid polyurethane insulation foam faced on both sides with a protective low vapor permeability 80 micron aluminum foil. They are completely CFC and HCFC free and are of highly thermal resistance. This panel is especially ideal for HVAC system installation.



### Phenolic (PF)

Phenolic foam pre-insulated ducting panel compounded with aluminum foil is of high strength, which takes phenolic foam as the core material with reinforced aluminum foil on both sides. It's a kind of non-combustible material which gives off no smoke and no poisonous gas when exposing to fire. Its bending strength reaches over 1MPa and the thermal conductivity index 0.02w/m.k. The phenolic foam can be fabricated into all kinds of rectangular (bended) ducts by cutting and adhesive connecting, then can be assembled into the air ductsof different specifications by using the flanges and adhesive. It's widely used for the ventilation systems of central air conditioning system in hotels, apartments, hospitals, office buildings and other deluxe buildings.

### Accessories

















	100	1				
		Cor	nparison of p	roperities		
	Phenolic duct	PU duct	Polyethylene(PE)	Rock wool	Ducts from Glass fiber	Rubber
Standard Specification	4*1.2*0.02 m	4*1.2*0.02 m	2.06*1.03 m	0.63*1.2 m		1.2*1.2 m
Common Thickness	20-30 mm	20-30mm	12,15,20,25,30 mm	30,40,50 mm	30 mm	9,13,19 mm
Fire Resistant	Non-combustible Class A	Refractory grade B1 (flame retardant)	Refractory grade B1 (flame retardant)	Grade A	Grade A	Refractory grade B1
Thermal Conductivity	0.02 W/M.K	0.021 W/M.K	0.032 W/M.K	0.0328 W/M.K	0.038 W/M.K	0.034 W/M.K
Apparent Density	50-60 kg/m³	40-50 kg/m <sup>3</sup>	59 kg/m <sup>3</sup>	60-120 kg/m <sup>3</sup>	120 kg/m <sup>3</sup>	65-85 kg/m <sup>3</sup>
Whole weight	1.2+/-0.1 kg/m <sup>2</sup>	1.1+/- 0.1 kg/m²	9.28 kg/m <sup>2</sup> (including iron sheet)	12 kg/m² (including iron sheet)	12 kg/m²	9.32 kg/m²
Void structure	Close void rate: >95%	Close void rate: >95%	Close void rate: 85%	Opened void	Compact entity	Close void rate about 80%
Water absorption	<1.9%	<0.6%	0.8-1.2%	Easy water absorption	Easy moisture absorption	1.5-3.0%
Working Temperature	-260°C~+150°C	-60℃~+100℃	-55°C∼+90°C	7°C~300°C	0°C~ 105°C	-40℃~105℃
Environment Protection Property	Meets the requirement for environment protection	Meets the requirement for environment protection	Meets the requirement for environment protection	bad	has tiny fiber	better
Use Range	In door/Outdoor	In door/Outdoor	Indoor	Indoor	Indoor	Indoor
Aging resistance	good	good	common	powdered	powdered	better
Appearance	beautiful	beautiful	common	worse	common	better
Appearance color	aluminum	aluminum	grey	aluminum	white	white
Use condition	Independent use (integration)	Independent use (integration)	In combined with galvanized iron sheet	In combined with galvanized iron sheet	hdependent use(integration)	In combined with galvanized iron sheet
Manufacture & montage	simple	simple	complicate	complicate	more complicate	complicate
Construction quality	Easy construction and control	Easy construction and control	Many links, difficult control	Many links, difficult control	Manylinks, difficult control	Many links, difficult control
Re-use rate	90%	90%	0	0	0	0
Life-span	Over 20 years	Over 20 years	8-10 years	6 years	6 years	10-15 years
Maintenance & repair	Basically unnecessary	Basically unnecessary	more frequent	frequent & complicate	less maintenance	less maintenance