

Applications: Copper and steel pipework in HVAC and industrial applications.

Pre-formed mineral wool snap-on pipe sections designed to provide thermal and acoustic insulation of pipework in H&V, air conditioning and industrial applications.



Description

Isowool Pipe Insulation consists of strong and yet lightweight pre-formed 'snap on' sections engineered from non-combustible mineral wool containing special water repellent additives. Two types are available:

Isowool Foil Pipe Insulation has a factory-applied reinforced aluminium foil covering incorporating a self-adhesive overlap. This helps to provide effective vapour control finish, allowing use on pipes operating at below ambient temperatures.

Isowool Plain Pipe Insulation is supplied without an outer covering and is suitable for use with or without site applied finishes on pipes operating at ambient temperatures and above.

Because **Isowool Pipe Insulation** is chemically inert (approximate pH value of 7) and will not cause corrosion of metal pipework, there is no necessity for bore coated sections. Therefore, there is no need for special re-coating measures on cut pieces at bends and elbows.

Standards

Isowool Pipe Insulation is manufactured under Quality Management Standard EN ISO 9001:2000. It can be used in accordance with the performance requirements and application standards of BS5422: 2001 'Method for specifying thermal insulating materials on pipes, ductwork and equipment'. (In the range -40 to +700°C)
BS5970: 2001 'Codes of practice for the thermal insulation of pipework and equipment'. (In the range -100 to +870°C)



Isowool Plain Pipe Insulation complies with Marine Equipment Directive (MED) 96/98 EC for use with ships complying with SOLAS 74 Convention and IMO Resolution A648 (The MODU Code)

Benefits

- High thermal and acoustic insulation.
- Completely fire safe – totally non-combustible.
- Will not absorb water.
- Durable not easily damaged in storage, during transport or on site when installing.
- Long product life will not age.
- Environmentally safe made from naturally occurring minerals.
- Chemically inert, approximate pH value of 7 - no need to bore-coat.

Fire Classification

The base mineral wool of **Isowool Pipe Insulation** is totally non-combustible. Isowool glass mineral wool also achieves Euroclass A1 fire rating. Additionally, the factory-applied aluminium foil facing meets the highest standards required by BS476: Part 6 'Fire Propagation' and BS476: Part 7 'Surface Spread of Flame'. The foil facing is therefore rated 'Class O' to the Building Regulations.

Service Temperature

Isowool Pipe Insulation can be used on pipework with continuous service temperatures of 250°C and over. For service temperatures in the range 250°C to 500°C, our Technical Department should be consulted for design advice. The temperature of the aluminium foil facing should not exceed 80°C.

Durability

- Odourless, inert and fully compatible with all standard pipework services and components.
- Will not accelerate corrosion with steel, copper or aluminium.

Product Performance & Characteristics

Thermal Conductivity

Mean Temperature °C	Thermal Conductivity W/m.K
10	0.032
50	0.035
100	0.043
200	0.062

Isospec

For assistance in specifying Isowool Pipe Insulation, use the Isowool Isospec programme. Visit Isowool.com to register for your free copy.



Water vapour permeance

The water vapour permeance of the factory applied foil covering on **Isowool Foil Pipe Insulation** is 0.00024g/(s.MN) and can therefore be used on pipework operating at temperatures below ambient.

Acoustic Performance

Noise levels emanating from pipework services can be significantly reduced with the use of **Isowool Pipe Insulation** due to the natural sound wave damping effect that glass mineral wool possesses. Contact our Technical Department for performance data.

Environmental

Isowool Pipe Insulation is a glass mineral wool product, manufactured from silica sand, the Earth's most abundant naturally occurring mineral. 'Cradle to Grave' energy analysis proves that glass mineral wool is one of the most environmentally friendly insulation materials. Inorganic and completely inert, over 70% of the raw material used in the production cycle are recycled. This process does not include the use of, CFC's, HCFC's or other environmentally damaging gases.

Product Dimensions

Isowool Pipe Section is manufactured in 1.2m lengths and in a range of thicknesses to enable compliance with BS5422 and beyond. The pre-formed pipe sections are produced to fit all British Standard steel and copper pipe sizes. They are supplied in cardboard cartons or strong plastic bags, depending upon sizes. The external circumferences are shown here for the various sizes of **Isowool Pipe Insulation** to allow accurate specifying of protective encasements.



Inner Diameter mm	Circumference of Pipe Section mm					
	Nominal Insulation Thickness mm					
	20	25	30	40	50	60
15	163	204	226	289	361	443
22	195	226	258	320	402	443
28	226	245	258	320	402	484
35	226	267	289	361	443	484
42	258	289	320	402	443	525
48	289	308	320	402	484	525
54	289	327	361	402	484	566
60	320	346	361	443	484	566
70	361	377	402	484	525	606
76	361	396	443	484	566	606
83	402	402	443	525	566	647
89	402	437	484	525	606	647
102	443	478	525	566	647	688
108	484	496	525	606	647	729
114	484	515	566	606	688	729
133		575	606	688	729	811
140		597	647	688	770	811
168		685	729	770	851	892
194				851	933	974
219				933	1015	1056
273				1097	1178	1219
324				1260	1342	1382

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