

Pipe Insulation

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.

Applications:

Copper and steel pipework in HVAC and industrial applications.



Description

ISOVER 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:

ISOVER 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.

ISOVER 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 ISOVER 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

ISOVER 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)



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ISOVER Plain Pipe Insulation complies with Marine Equipment Directive (MED) 96/98 EC for use with ships complying with SOLAS 74 Convention and IMO Resolution A799(19) (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 ISOVER Pipe Insulation is totally non-combustible. ISOVER glass mineral wool also achieves Euroclass A2 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

ISOVER Pipe Insulation can be used on pipework with continuous service temperatures of 230°C and over. For service temperatures in the range 230°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

Water vapour permeance

The water vapour permeance of the factory applied foil covering on **ISOVER Foil Pipe Insulation** is .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 **ISOVER Pipe Insulation** due to the natural sound wave damping effect that glass mineral wool possesses. Contact our Technical Department for performance data.

Ecological Information

ISOVER Pipe Section is made from glass mineral wool, one of the most environmentally friendly materials available.

Isospec

For assistance in specifying **ISOVER Pipe Insulation**, use the **Isospec** programme. Visit www.isover.co.uk to request your free copy.



Sustainable. **ISOVER Pipe Section** is manufactured from silica sand, the earth's most abundantly occurring mineral and a sustainable, infinite resource.

Recyclable. Approximately 80% of the raw material used in the production of **ISOVER Pipe Section** is recycled, far more than any comparable product. The recycled material can be post-consumer glass (from housing generation projects) or waste glass from bottle and flat glass manufacture, which would otherwise go to landfill.

Environmental. The manufacturing process does not use or contain CFC's, HCFC's or other damaging gases - nor has it ever. In addition, the unique resilience of **ISOVER** glass mineral wool enables high compression packing which means more insulation in a smaller space than almost any other insulant. The result is better vehicle utilisation, reducing the environmental impact of transportation.

Product Dimensions

ISOVER 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 **ISOVER Pipe Insulation** to allow accurate specifying of protective encasements.



Note on wall thicknesses:

nominal wall thicknesses can vary from actual, depending upon the circumference of the pipe section and bore size.

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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