

# Pipe Sections

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 Sections consist 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 Sections have 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 Sections are supplied without an outer covering and therefore are suitable for use with or without site applied finishes on pipes operating at ambient temperatures and above. Because ISOVER Pipe Sections are 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 Sections are 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  $+700^{\circ}$ C) BS5970: 2001 'Codes of practice for the thermal insulation of pipework and equipment'. (In the range -100 to +870°C)



ISOVER Plain Pipe Sections comply 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 Sections is totally non-combustible, achieving a 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 Sections 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 **Pipe Sections** 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 ISOVER **Pipe**Sections due to the natural sound wave damping effect that glass mineral wool possesses. Contact our Technical Department for performance data.

#### Evironmental Performance of ISOVER Glass Wool

Glass mineral wool is one of the most environmentally friendly, stable and sustainable insulants available. Its raw material is silica sand, the earth's most abundantly

#### Isospec

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



occurring natural material. And its impact on the environment in manufacture, use and disposal is minimal. In addition, all ISOVER glass mineral wool insulation contains around 80% recycled glass originated from used consumer

around 80% recycled glass originated from used consumer packaging or industrial glass by-product that would normally be destined for landfill.

## BRE Green Guide to Specification

Glass mineral wool has a best in class 'A' summary rating in the BRE Green Guide to Specification - Reference p.72 'Zero ozone depletion potential insulation'.

## EcoHomes – The Environment Rating for Homes

In use, ISOVER products achieve full credit under EcoHomes performance for Zero Ozone Depletion and Global Warming Potential of less than 5 - Referenced p.42, section Pol 1 'Insulant ODP and GWP, Guidance Note 3.

# **Product Dimensions**

ISOVER **Pipe Sections** are 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.



#### Note on wall thicknesses:

Nominal wall thicknesses can vary from actual, depending upon the outer diameter of the pipe section and bore size.

Inner	Outer diameter of Pipe Section (mm)								
Diameter	Nominal Insulation Thickness (mm)								
(mm)	20	25	30	40	50	60	80	100	
12	52	62	72	92	-	-	-	-	
15	52	65	72	92	115	141			
18	62	68	72	102	115	141			
22	62	72	82	102	128	141			
28	72	78	88	102	128	154			
35	72	85	92	115	141	154			
42	82	92	102	128	141	167			
48	92	98	108	128	154	167			
54	92	104	115	128	154	180			
60	102	110	120	141	154	180	219		
70	-	120	128	154	167	193	232		
76	-	126	141	154	180	193	232		
83	-	133	141	167	180	206	245		
89	-	139	154	167	193	206	245		
102	-	152	167	180	206	219	258	297	
108	-	158	167	193	206	232	271	310	
114	-	164	180	193	219	232	271	310	
133	-	183	-	219	232	258	297	336	
140	-	190	206	219	245	258	297	336	
159	-	209	-	245	258	284	323	362	
168	-	218	232	245	271	284	323	362	
194	-	244		271	297	310	349	388	
219	-	269	284	297	323	336	375	414	
273	-	323	-	349	375	388	427	479	
324	-	374	-	401	427	440	479	-	

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General Enquiries: Saint-Gobain ISOVER UK, East Leake, Loughborough, Leicestershire LE12 6JU Tel: 0115 945 1050 Fax: 0115 945 1915 Saint-Gobain Isover UK reserve the right to alter or amend product specification without notice. The information given in this publication is correct to the best of our knowledge at the time of publication. Whilst Saint-Gobain Isover UK will endeavour to ensure publications are up to date, it is the users responsibility to check with us that it is correct prior to use.

