

## Duct Wrap and Duct Slab

Designed to provide high levels of thermal and acoustic insulation in HVAC ductwork applications.

### Applications:

Rectangular, flat oval and circular ductwork in HVAC applications.



### Description

There are two grades of Duct Slab and a single, high performance grade of Duct Wrap.

ISOVER Multi-Purpose Duct Slab is suitable for use with all types of rectangular ductwork.

ISOVER High Performance Duct Slab is suitable where an extra firm substrate is required for subsequent coverings.

ISOVER High Performance Duct Wrap is a strong, easy to handle mattress for use with all shapes of ductwork.

### Fire Classification

The base mineral wool of ISOVER duct products has a Euroclass A1 fire rating when classified in accordance with BS EN 13501 - 1. 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 Duct Wrap and Duct Slab have a maximum continuous service temperature of 230°C. They can also be used in below-ambient conditions, provided that a 100% vapour barrier is maintained. They are dimensionally stable over this temperature range. The temperature of the foil facing should not exceed 80°C.

### Standards



ISOVER Duct Wrap and Duct Slab are manufactured under Quality Management Standard BS EN ISO 9001:2000, and in compliance with the requirements of: BS3958: Part 5:1986, 'Specification for

bonded man-made mineral fibre slabs'.

The products can be used in conjunction with the performance requirements and application standards of: BS5422: 2001, 'Method for specifying thermal insulating material on pipes, ductwork and equipment (in the temp range -40 to +700°C)'. BS5970:2001, 'Code of practise for the thermal insulation of pipework and equipment (in the temperature range -100 to + 870°C)'.

### Benefits

- Completely fire safe - totally non-combustible.
- Will not absorb moisture.
- 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.

### Durability

- Odourless, inert and fully compatible with all standard HVAC materials and components.
- Will not accelerate corrosion with steel, copper or aluminium.
- Will not sustain vermin, nor breed or promote fungi or bacteria.
- Will not slump or consolidate in application.

### Ecological Information

ISOVER Duct Wrap and Duct Slab are made from glass mineral wool, one of the most environmentally friendly materials available.

### Sustainable.

ISOVER Duct Wrap and Duct Slab are 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 Duct Wrap and Duct Slab are 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 Performance of ISOVER glass mineral wool

- **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 Environmental 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 Performance and Characteristics

## Thermal Conductivity

Thermal conductivity at 10°C mean temperature	
ISOVER Multi Purpose Duct Slab	0.032 W/m.K
ISOVER High Performance Duct Slab	0.030 W/m.K
ISOVER High Performance Duct Wrap	0.033 W/m.K.

## Isospec

For assistance in specifying ISOVER Duct Wrap and Duct Slab, use the Isospec programme. Visit [www.isover.co.uk](http://www.isover.co.uk) to request your free copy.



## Water vapour permeance

Water vapour permeance 0.0037 g/(s.MN) (foil facing)

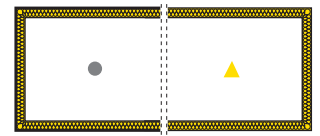
## Acoustic Performance

ISOVER duct products provide a high level of acoustic performance against noise break-out from ductwork. The following examples show the minimum performance expected from rectangular metal ductwork, 1mm wall thickness, insulated with ISOVER duct slabs.

### Duct dimension 1200mm x 500mm

Insulated with 40mm ISOVER Multi-Purpose Duct Slab or 40mm High Performance Duct Slab

▲  $D_{e,w} = 9\text{dB}$



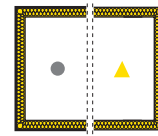
●  $D_{e,w} = 20\text{dB}$

Insulated with 40mm ISOVER Multi Purpose Duct Slab or 40mm High Performance Duct Slab with additional 1mm sheet metal covering

### Duct dimension 600mm x 500mm

Insulated with 40mm ISOVER Multi-Purpose Duct Slab or 40mm High Performance Duct Slab

▲  $D_{e,w} = 8\text{dB}$



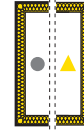
●  $D_{e,w} = 19\text{dB}$

Insulated with 40mm ISOVER Multi Purpose Duct Slab or 40mm High Performance Duct Slab with additional 1mm sheet metal covering

### Duct dimension 300mm x 500mm

Insulated with 40mm ISOVER Multi-Purpose Duct Slab or 40mm High Performance Duct Slab

▲  $D_{e,w} = 8\text{dB}$



●  $D_{e,w} = 19\text{dB}$

Insulated with 40mm ISOVER Multi Purpose Duct Slab or 40mm High Performance Duct Slab with additional 1mm sheet metal covering

## Product Dimensions

ISOVER Duct Wrap and Slab are compression packed in individual packs using a strong polythene packaging film. The packs are then stacked on wooden pallets with a final weatherproof outer covering, giving the option for outside storage. ISOVER Duct Slabs are manufactured in 1200mm x 600mm dimension. ISOVER High Performance Duct Wrap is manufactured in a 1200mm wide compression wrapped roll.



Thickness	ISOVER Multi-Purpose Duct Slab		ISOVER High Performance Duct Slab		ISOVER High Performance Duct Wrap	
	Slabs/pack	m <sup>2</sup> /pack	Slabs/pack	m <sup>2</sup> /pack	Roll length	m <sup>2</sup> /pack
25mm	-	-	-	-	18.0m	21.60
40mm	12	8.64	10	7.20	12.0m	14.40
50mm	10	7.20	9	6.48	9.0m	10.80

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