

Iso-Fibre mats needled

Information

Iso-Fibre mat is a revolutionary breakthrough in insulating materials technology and is best suitable for applications with high temperatures. The high temperature fibre used has very good bio-solubility.

Application

Domestic appliances: boilers, fire seals, storage heater insulation, wood burning stove seals, insulation chimney fill, domestic cookers

Fire protection: offshore rig accommodation modules, column and beam wrap, fire door infill

Properties

Incombustible. Approved for the covering of construction steel. Excellent thermal and physical stability up to 1100°C. It is light weight, flexible and has exceptional acoustic absorption properties. Excellent tensile strength through special production process. Iso-Fibre blankets do not contain organic binders.

Technical data

Colour: blueish-white
Melting point: > 1330 °C
Application temperature: 1100 °C
Fibre Diameter: 4,0 µm

The Iso-Fibre is non-combustible in accordance with BS476: Part 4 and is approved for use against cellulosic and hydrocarbon fires and for dry wrapping of structural steel.

Permanent Linear Shrinkage after 24 hours

at 1000°C < 2,0 % and at 1100°C < 4,0 %

Chemical Analyses (wt.%)

SiO ₂	61 – 67 %
CaO	27 – 33 %
MgO	2,5 – 6,5 %
Al_2O_3	< 1,0 %
Fe_2O_3	< 0,6 %

Thermal Conductivity Data W/mK	64 kg/m³	96 kg/m³	128 kg/m³	160 kg/m³
200°C Mean Temp.	0.06	0.06	0.05	0.05
400°C Mean Temp.	0,06 0,11	0,06 0,09	0,05 0,08	0,05 0,08
600°C Mean Temp.	0,17	0,14	0,12	0,11
800°C Mean Temp.	0,26	0,20	0,18	0,15
1000°C Mean Temp.	0,38	0,29	0,25	0,21



Availability

Thickness	13 mm	19 mm	25 mm	38 mm	50 mm
Standard Roll Length (m)	14,64 m	10,00 m	7,32 m	5,0 m	3,66 m
96 kg/m ³	~	~	~	>	>
128 kg/m³	~	~	~	>	>
160 kg/m³	~	~	~	>	>

Standard roll width are 610 mm.

Other thickness / density variations are subject to order.

Material Safety Datasheet is available for this product.

It will be understood that this information is an outline description only. The results were taken from tests and are of informal advice. We therefore recommend a test according to local conditions. To answer your questions, our staff of the sales department are at your disposal. 10/2023