

Fibermesh-128 Rockwool Data Sheet

Product Description

Fibermesh-128 is a robust high density thermal insulation suitable for high temperature application. It consists of a mat of long, fine fibres spun from molten natural rock stitched with wire to facing of 25mm galvanised hexagonal wire mesh.

A suitable finish such as metal cladding is necessary to protect the insulation from weather and mechanical damage.



Fibermesh-128 Rockwool

Applications

Process temperature control, energy conservation and personnel protection in the power generating, metallurgical, oil refining and chemical industries, including plant and equipment such as exhaust flues, hot gas ducts, boilers, furnaces, ovens, autoclaves and kilns.

Fibermesh-128 is easily installed by impaling the slabs on weld pins (with the mesh facing outwards) and securing with speed clips. The mesh joints may be laced together for extra strength.

Standard Sizes & Packaging

Thickness (mm)	Blanket Size (mm x mm)	Pieces/Pack
25	5000 x 600	1
30	5000 x 600	1
40	5000 x 600	1
50	5000 x 600	1
60	4000 x 600	1
70	3000 x 600	1
80	3000 x 600	1
90	3000 x 600	1
100	2000 x 600	1

Note: Not all standard sizes are held in stock. Some are subject to minimum order quantities. Standard packaging is shrink-wrapped polythene.

Nominal Density

128 kg/m³ (8 lb/ft³)

Maximum Service Temperature

Recommended operating temperature up to 650 °C (1202 °F)
Capability of handling intermittent temperature up to 1000 °C (1832 °F)

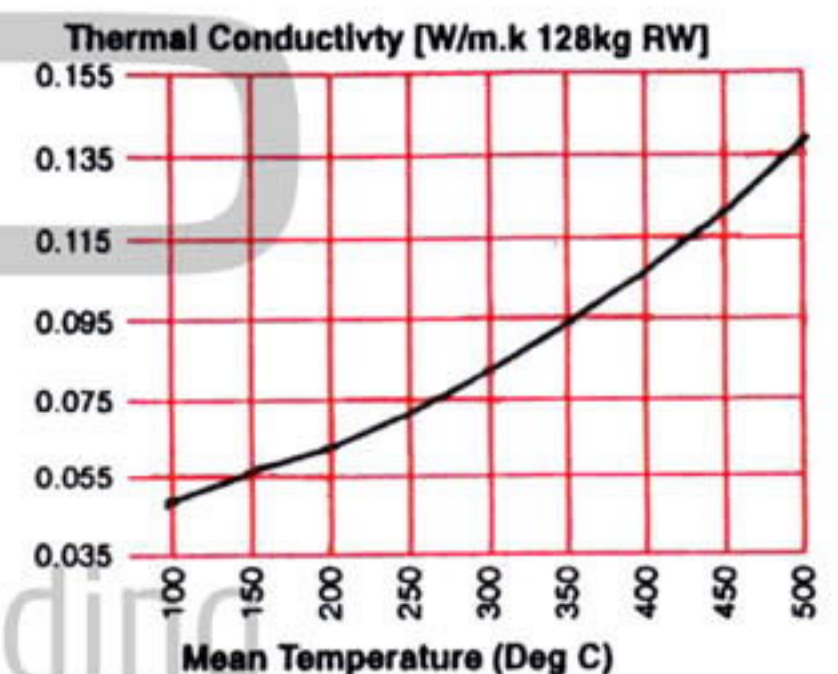
Fusion Temperature

Fusion temperature or Melting point of rockwool at 1200 °C (2192 °F)

Thermal Conductivity

0.034 W/mK at 20 °C
(0.235 BTU in/ft²h °F)

The thermal conductivity of Fibermesh-128 varies with the mean temperature of the insulation as shown in the graph. The curve is based on measurements made with a guarded hot-plate apparatus in accordance with BS874:1973.



Early Fire Hazard Indices

When tested in accordance with Australian Standard 1530: Part 3-1976, Fibermesh-128 has the following Early Fire Hazard Indices:
(AS 1530:Part 3-1976 specifies similar test procedures to BS476:Parts 5, 6 and 7:1968)

Ignitability (0-20)	0
Spread of Flame (0-10)	0
Heat Evolved (0-10)	0
Smoke Developed (0-10)	0

Corrosion Resistance

Fibermesh-128 is faintly alkaline and is incapable of corroding steel. To maintain this condition, protection must be provided against contamination from external sources. When tested in accordance with BS 3958 : Part 5: 1969, Fibermesh-128 has a pH of 7.5 to 8.0. Fibermesh-128 contains less than 15ppm soluble chlorides which minimises the risk of external stress corrosion cracking in austenitic stainless steels. Stainless mesh may be specially ordered for applications where galvanised mesh is not suitable.

Moisture Resistance

Exposure of Fibermesh-128 to a controlled atmosphere of 50°C and 95% relative humidity for 96 hours results in moisture absorption of less than 0.2% by volume. Should the blankets become wet, full thermal efficiency will be restored on drying out. Water repellent grade according to BS 2792 Section 12 is available to order.

Flexibility

Fibermesh-128 blankets are designed for maximum flexibility. They will essentially retain their thickness, while conforming to virtually any regular shape.

Retention of the fibres by the wire mesh prevents any cracking or breaking.

Vibration Resistance

Because the fibres in Fibermesh-128 are stitched to the wire mesh, the blankets are especially resistant to fallout under conditions where vibration is present.

Fibermesh-128 is particularly useful in situations involving both vibration and high temperatures where standard bonded insulation materials are less resistant to the effects of vibration.

