



RocksilK Mattress

Description

RocksilK Mattress is non-combustible rock mineral wool faced on one side with galvanised or stainless steel wire mesh to form a firm but flexible general purpose insulating mattress. It is available in two densities, Standard Density (SD) is 100kg/m³ and Heavy Density (HD) is 125kg/m³. The galvanised wire mesh is 0.82mm x 25mm (22swg x 1"). Both grades are also available with a stainless steel mesh, 0.9mm x 25mm.

Application

RocksilK Mattress is specifically designed for the thermal insulation of large vessels and high temperature plant, such as cylindrical and irregular shaped pieces of equipment, high towers for chemical process plants, large storage tanks and spheres as well as boilers and steam turbines. RocksilK Mattress is particularly suited for irregularly shaped plant such as valves and flanges.

Product Data

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m ² K/W)	Roll Size (mm)	Area per pack (m ²)
RocksilK Mattress SD1 - Standard Density (wired on one side)				
75	0.033	2.25	2500 x 900	2.25
50	0.033	1.50	4000 x 900	3.60
RocksilK Mattress HD1 - Heavy Density (wired on one side)				
50	0.033	1.50	4000 x 900	3.60

All dimensions are nominal

Performance

Thermal

RocksilK Mattress has a thermal conductivity of 0.033 W/mK at 10°C - see table overleaf.

Fire

RocksilK Mattress is classified as non-combustible to BS 476: Part 4: 1970 (1984), Class 1 Surface Spread of Flame to BS 476: Part 7: 1997 and Class 'O' to the Building Regulations.

Benefits

- Excellent thermal and acoustic insulation for irregularly shaped surfaces
- Non-combustible
- Suitable for high temperature equipment
- Strong and flexible
- Easy to handle and install



Standards

Rocksilk Mattress is made from non-combustible, inorganic rock wool, defined as mineral wool in BS 3533: 1981 and is manufactured to a Quality Assurance system which complies with BS EN ISO 9001:2000.

Thermal Performance

Mean Temperature (°C)	Thermal conductivity Type SD (W/mK)	Thermal conductivity Type HD (W/mK)
10	0.033	0.033
100	0.044	0.043
150	0.052	0.050
200	0.062	0.059
250	0.074	0.070
300	0.088	0.082
350	0.104	0.096
400	0.124	0.111

All dimensions are nominal

Durability

Rocksilk Mattress is odourless, non-hygroscopic, rot proof, does not sustain vermin and will not encourage the growth of fungi, mould or bacteria. Rocksilk Mattress is non-wicking when tested to BS 2972:1989: Section 12.

Environmental

Rocksilk Mattress is free from CFCs, HCFCs and any other material with ozone depletion potential in its manufacture and content and represents no known threat to the environment.

Rocksilk Mattress's manufacture has a low impact on the environment and is classified as Zero ODP and Zero GWP.

Acoustic

Rocksilk Mattress has excellent acoustic absorption properties and can be used to improve the acoustic insulation of vessels and equipment.

Moisture Resistivity

When exposed to 90% humidity and 20°C, Rocksilk Mattress absorbs less than 0.004% of moisture.

Operating Temperatures

Standard density (SD) Rocksilk Mattress can be used up to a continuous operating temperature of 600°C and heavy density (HD) can be used up to 750°C.

Handling and Storage

Rocksilk Mattress is easy to handle and install.

Rocksilk Mattress is supplied in polythene shrink wrapped packs, which are designed for short term protection only. For longer term protection on site, the product should be stored either indoors, or under cover and off the ground.

Rocksilk Mattress should not be left exposed to the elements.

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For more information please refer to
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