



FIBERMESH 450 ROCKWOOL

Introduction

Bradford Fibermesh 450 is a general purpose industrial insulation for use on process equipment, vessels, tanks and reactors. It is a medium duty thermal and acoustic insulation suitable for continuous operation up to 450°C. It has a stitched Galvanised or Stainless Steel mesh that allows it to fit to irregular shaped surfaces for fast insulation repair work.

Product Description

Bradford Fibermesh 450 Rockwool is a robust medium density insulation product stitched on one side with a 25mm galvanised or stainless steel wire mesh. Fibermesh 450 is manufactured from spinning a molten mixture of natural rock and recycled products into fine wool like fibres. The inorganic fibres are bonded together using a thermosetting resin and the mesh is then stitched to the base Rockwool to form the final product. The product can be identified by its dark green/brown appearance.

Applications

Fibermesh 450 can be used in applications where operating temperatures do not exceed 450°C such as process temperature control, energy conservation, condensation prevention, acoustic absorption treatment and personnel protection for plant and equipment. The Mesh facing provides additional strength and flexibility allowing the product to form and hold form around process equipment, ductwork and large diameter piping.

Typical applications include boilers, heat exchangers, reactors, ovens, kilns, autoclaves and large diameter piping.

Bradford Fibermesh 450 is easily installed by impaling the batts or blankets on weld pins and securing with speed clips. The mesh joints may be laced together for extra strength if required.

Benefits

- Lightweight highly durable insulation product
- Easily formed and holds shape of equipment to be insulated
- Does not need other means of fixings (bands, seals)
- Excellent and cost effective thermal insulation
- Performance is not adversely effected from contact with water
- Non combustible
- Low chloride content resulting in less corrosion of insulated steel process equipment
- Biosoluble safe to use product

Available Facings

Fibermesh 450 is available faced with either a Galvanised or Stainless Steel Mesh. Stainless steel Fibermesh is used in corrosive environments

Health and Safety

This product is manufactured to the latest Fibre Bio-Soluble (FBS-1) Rockwool formulation and is not classified as hazardous according to the criteria of the ASCC (formally NOHSC) guidelines. For further information refer MSDS sheet on Bradford website.

SKU Table

Thickness (mm)	Length (mm)	Width (mm)	Pieces per Pack	Nominal M2 per pack	Nominal Piece Weight (kg)	Nominal Weight/pack (kg)
25	6000	750	1	4.5	11.3	11.3
38	5000	750	1	3.8	14.3	14.3
50	4000	750	1	3.0	15.0	15.0
63	3000	750	1	2.3	14.2	14.2
75	3000	750	1	2.3	16.9	16.9
88	2400	750	1	1.8	15.8	15.8
100	2400	750	1	1.8	18.0	18.0

Standard packaging is polythene bags

Note: Published weights are for product only and do not include packaging

Products not stocked in NZ may be subject to minimum runs. Please check with the Bradford office before ordering.

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Physical Properties

Density	kg/m ³	80														
Maximum Service Temperature		450 °C														
Thermal Conductivity	Based on measurements obtained with guarded hot-plate apparatus in accordance with BS874-1973	<table border="1"> <caption>Thermal Conductivity Data</caption> <thead> <tr> <th>Temperature (°C)</th> <th>Apparent Thermal Conductivity (W/m K)</th> </tr> </thead> <tbody> <tr><td>100</td><td>0.045</td></tr> <tr><td>200</td><td>0.060</td></tr> <tr><td>300</td><td>0.090</td></tr> <tr><td>400</td><td>0.130</td></tr> </tbody> </table>	Temperature (°C)	Apparent Thermal Conductivity (W/m K)	100	0.045	200	0.060	300	0.090	400	0.130				
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Fire Resistance Level	AS/NZS 1530.3:1999	Ignitability: 0; Spread of flame 0; Heat Evolved 0; Smoke Developed 0														
Compressive Resistance	Based on measurements obtained with guarded hot-plate apparatus in accordance with BS874-1973	<table border="1"> <caption>Compressive Resistance Data</caption> <thead> <tr> <th>Pressure (kPa)</th> <th>Reduction in Nominal Thickness (%)</th> </tr> </thead> <tbody> <tr><td>0</td><td>0</td></tr> <tr><td>5</td><td>30</td></tr> <tr><td>10</td><td>45</td></tr> <tr><td>15</td><td>55</td></tr> <tr><td>20</td><td>60</td></tr> <tr><td>25</td><td>65</td></tr> </tbody> </table>	Pressure (kPa)	Reduction in Nominal Thickness (%)	0	0	5	30	10	45	15	55	20	60	25	65
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Corrosion Resistance	BS 3958 part 5- 1969	pH 7.5-9.0; Less than 20ppm soluble chlorides;														
Flexibility		Designed for maximum flexibility. Wire mesh prevents cracking or breaking of the material.														
Moisture Absorption	When placed in a controlled atmosphere of 50°C and 95% relative humidity for 96 hours.	Less than 0.2% by volume.														
Vibration Resistance		Wire mesh allows the product to be especially resistant to fallout where vibration is present.														
Sample Specification		Install Bradford Fibermesh 450 in accordance with manufacturers written installation instructions.														

FIBERMESH 450 ROCKWOOL – DATA SHEET