

ROCKWOOL

FIBERTEX-450 Industrial Blanket and Board

DATA SHEET

Product Description

Fibertex-450 is a medium density mineral fibre for thermal and acoustical insulation. It consists of long, fine fibres, spun from molten natural rock and formed into resin-bonded slab and blanket. A suitable finish such as metal cladding is recommended to protect the insulation from weather or mechanical damage. Fibertex-450 is supplied in flexible roll form and semi-rigid slab with good load bearing characteristics for a wide variety of applications, at both high and low temperatures.



Fibertex-450 Rockwool

Applications

Fibertex-450 is ideally suitable for a wide variety of both high and low temperature applications in Ovens, Boilers, Hot and Cold Ductwork, Piping, Storage tanks, Chimneys. Fibertex-450 is easily installed by impaling with pins and securing with speed clips. For small diameter vessels or irregular shaped surfaces, Fibermesh-450 is recommended. Fibertex-450 provides excellent acoustic performance as a sound absorbent material for wall lining and silencers. Furthermore, it can be used as fire safing insulation in Fire doors and Fire barriers.

Standard Sizes & Packaging

Thickness (mm)	Blanket Size (mm x mm)	Pieces /pack	Board Size (mm x mm)	Pieces /pack
25	5000 x 600	1	1200 x 600	12
30	5000 x 600	1	1200 x 600	10
40	5000 x 600	1	1200 x 600	6
50	5000 x 600	1	1200 x 600	6
60	4000 x 600	1	1200 x 600	5
70	3000 x 600	1	1200 x 600	4
80	2000 x 600	1	1200 x 600	3
90	2000 x 600	1	1200 x 600	3
100	2000 x 600	1	1200 x 600	3

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

Nominal Density

80 kg/m³ (5 lb/ft³).

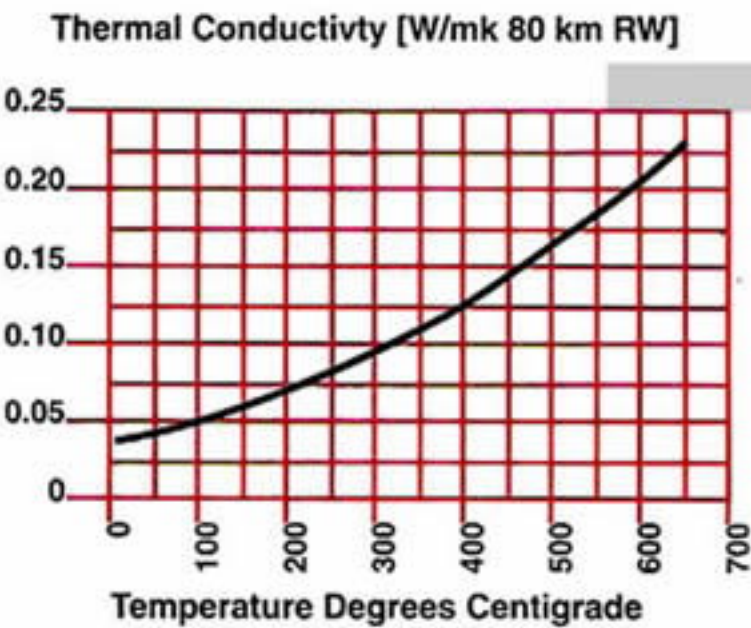
Maximum Service Temperature

Recommended operating temperature up to 450 °C (842 °F)
 Capability of handling intermittent temperature up to 1000 °C (1832 °F)

Fusion Temperature

Fusion temperature or Melting point of rockwool at 1350 °C (2462 °F)

Thermal Conductivity



0.034 W/mK at 20°C mean temperature (0.235 BTU in/ft²h°F at 68°F)

Thermal conductivity of Fibertex-450 varies with the mean temperature as shown in graph according to BS 874-1973.

Insulation performance requirements may be specified in many different ways such as Thermal conductivity, Thermal resistance, Process temperature, Allowable surface temperature or Heat loss.

CSR Application Engineers will provide technical services and more details to meet any specification.

Factory Applied Facings Product is available to order with wide ranges of factory applied facings such as various grades of aluminium foil, glass cloth, glass matt, polyester laminate.

Fire Performance	Fibertex-450 achieves four zero Early Fire Hazard Indices when tested in accordance with AS 1530:Part 3-1976 (same as BS 476 : Part 5, 6, 7-1967) for non-combustible material.	Ignitability	(0-20)	0
		Spread of Flame	(0-10)	0
		Heat Evolved	(0-10)	0
		Smoke Developed	(0-10)	0

Moisture Resistance Exposure to an atmosphere of 50°C and 95% relative humidity for 96 hours results in moisture absorption of less than 0.2% by volume. Should insulation become wet, full thermal efficiency will be restored on drying out.
Water repellent grade according to BS 2792 section 12 is available to order.

Corrosion Resistance Fibertex-450 is faintly alkaline and is incapable of corroding steel, copper, or aluminium. To maintain this condition, protection must be provided against contamination from external sources. When tested in accordance with BS 3958: Part 5-1969, results in range of pH 7.5 - 8.0. Fibertex-450 contains less than 15ppm soluble chlorides. For critical applications involving austenitic stainless steel, a low chloride formulation is available to order.

Acoustic Properties When tested in a reverberation chamber in accordance with AS 1045-1971 sound absorption coefficients of Fibertex-450 are shown in the table:

Thickness		Centre Frequency (Hz)						
(mm)		125	250	500	1000	2000	4000	5000
25		0.11	0.20	0.80	1.10	1.02	1.12	1.20
50		0.36	0.91	1.19	1.20	1.07	1.05	1.19

NRC⁺ is the average sound absorption coefficient between 250 to 2000 Hz

Compression Resistance Fibertex-450 is a resilient insulation material which readily recovers to original shape after removal of compressive load.

The graph shows the reduction in thickness (%) under compressive load (kPa), measured in accordance with BS 2972-1975.

