




DESCRIPTION

FireMaster 607™ Water Repellent Blanket is a flexible, resilient product that is able to provide effective fire protection in standard, hydrocarbon and jet fire applications whilst limiting water ingress through the use of a special additive treatment.

FireMaster Water Repellent Blanket has all the excellent handling and fire performance features of standard FireMaster Blanket whilst providing excellent resistance to water ingress due to the water repellent treatment being applied throughout the entire blanket thickness. Furthermore, the small amount of additive used ensures the blanket retains the non-combustibility performance of the base blanket.

FireMaster Blanket has low density thus allowing even hydrocarbon fire protection standards to be met using thin and light specifications significantly contributing to weight savings.

HEALTH ASPECTS SUMMARY

FireMaster 607 was designed for enhanced solubility in lung tissues. Rats have been exposed 6 hours a day, 5 days a week during 2 years at an average concentration of 200 F/ml (about 200 to 300 times higher than the concentration found in production plants) without showing any significant increase in lung tumours or fibrosis.

APPLICATIONS

- 'A' class and IMO HSC steel, aluminium and PVC composite bulkhead and deck insulation in high speed craft
- Upgrading of fire performance of composite panels to meet IMO room corner test requirements
- H class and A class steel bulkhead and deck fire protection for ships and offshore platforms
- Hydrocarbon and Jet fire protection of process pipes
- Hydrocarbon and Jet fire protection of vessels
- Infill to fire doors and cladding panels
- Construction joints
- Cellulosic and hydrocarbon fire protection of structural steelwork
- Ductwork fire protection
- Cable tray fire protection

MAIN PROPERTIES

General Properties

- Colour : white with key production data printed on surface
- Linear shrinkage (24 hrs at 1000°C) <1%
- Loss on ignition (5 hrs at 1000°C) <0.1%
- Silicone content <0.5%
- Water absorption 2.5%
- Increase in weight (per BS 2972 section 12)

Fire Protection Properties

- Non-combustibility: IMO A799 (19) using ISO 1182-1990 (E) method
Approved product number under EU Marine Equipment Directive: 0062

All other properties of FireMaster 607 Blanket will be as the ceramic fibre based FireMaster Blanket, which are detailed in the following sections.

Fire Hazard Properties per ASTM E-84 Method

- Flame spread: zero
- Fuel contributed: zero
- Smoke developed: zero

FireMaster 607 Blanket is inert and resistant to mould growth and attach by vermin.

Thermal Insulation Properties

- For insulation under ambient conditions the following maximum thermal resistance (R value) figures may be used for calculation of overall thermal transmittance (U value).

Thickness of blanket	R value (M K/W)
25mm	0.73
38mm	1.11
50mm	1.46
75mm	2.19
100mm	2.92

Basis: Thermal conductivity of 96kg/m³ density measured at 20°C to BS 874 of 0.0342 W/MK.

Thermal Insulation Properties (continued)

FireMaster 607 provides good thermal insulation over its entire operating temperature range.

- Thermal conductivity (ENV 1094-7) at mean temperature of:

	64kg/m ³	96kg/m ³	128kg/m ³	160kg/m ³	192kg/m ³
200°C	0.07	0.06	0.06	0.06	0.06
300°C	0.09	0.08	0.08	0.07	0.07
400°C	0.12	0.11	0.10	0.09	0.09
500°C	0.17	0.14	0.13	0.12	0.11
600°C	0.22	0.17	0.16	0.15	0.14

Acoustic Insulation Performance

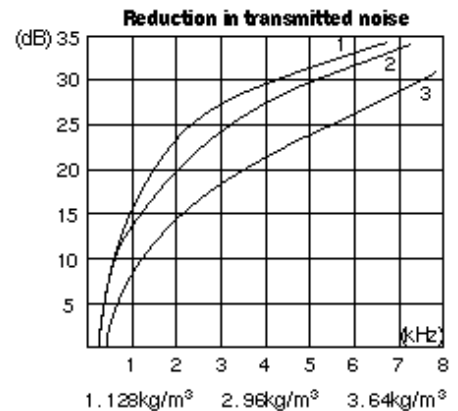
Sound Absorption

FireMaster 607 Blanket is an excellent acoustic insulation material. The data below is the result of tests carried out on FireMaster Blanket to BS 3638. Further details are available on request.

Frequency	Sound Absorption Coefficient	
	25mm/96kg/m	25mm/128kg/m
125	0.79	0.09
250	0.29	0.54
500	0.73	0.86
1000	0.92	0.94
2000	0.96	0.94
4000	0.99	0.96
Noise Reduction Coefficient	0.72	0.82

Sound Attenuation

The graph opposite summarises data obtained in acoustic tests carried out to ASTM E336-71, on the attenuation of noise transmitted through 25mm thick FireMaster Blankets as a function of sound frequency. Further details are available on request.



Availability and Packaging

Supplied in rolls of 610mm and 1220mm width.

The roll length varies with thickness to use one standard carton size. Each roll is identified with the product thickness density, grade and key production data.

Density kg/m	13mm	20mm	25mm	38mm	50mm	63mm	70mm
96	Yes	Yes	Yes	Yes	Yes	Yes	Yes
128	Yes	Yes	Yes	Yes	Yes	Yes	No
160	Yes	Yes	Yes	Yes	No	No	No
190	Yes	Yes	Yes	No	No	No	No
Roll length	14.64m	9.76m	7.32m	4.88m	3.66m	2.3m**	2.3m**

**2300mm lengths are supplied as flat slabs not rolls.

Your local contact:

Distributed by:

The values given herein are typical average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Therefore, the data contained herein should not be used for specification purposes. Check with your Thermal Ceramics office to obtain current information.

Thermal Ceramics Marketing Offices

Thermal Ceramics Americas

2102 Old Savannah Road
Augusta, Georgia 30903
Tel: +1 706 796 4200
Fax: +1 706 796 4398

E-mail: tceramics@thermalceramics.com

Thermal Ceramics Asia Pacific

28 Jalan Kilang Barat
Kewalram House, Singapore 159362
Tel: +65 6273 1351
Fax: +65 6273 0165

E-mail: thermalceramics@tasia.com.sg

Thermal Ceramics Europe

Tebay Road, Bromborough
Wirral CH62 3PH UK
Tel: +44 (0) 151 334 4030
Fax: +44 (0) 151 334 1684

E-mail: marketing@thermalceramics.co.uk

Website: www.thermalceramics.com