




### DESCRIPTION

FireMaster 607™ ALU 40 Blanket is a flexible resilient product based on FireMaster 607 alkaline earth silicate blanket which incorporates an integral aluminium foil vapour barrier and is able to provide effective fire protection in standard, hydrocarbon and jet fire applications.

FireMaster ALU 40 Blanket has all the excellent handling and fire performance features of standard FireMaster Blanket whilst offering the convenience of an integral vapour barrier.

The aluminium foil is attached with mineral glue and therefore FireMaster ALU 40 Blanket is a non-combustible product.

ALU 40 blanket can be based on either the standard or water repellent grades of FireMaster Blanket.

### 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.

### FEATURES

- '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; layer of aluminium foil on other surface
- Linear shrinkage (24 hrs at 1000°C) <1%
- Loss on ignition (5 hrs at 1000°C) <0.1%
- Foil characteristics : 40 micron thick aluminium with sodium silicate glue
- Foil peeling force : 4N for water repellent blanket  
6N for non-water repellent blanket

#### 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.

#### 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/m<sup>3</sup> 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 <sup>3</sup>	96kg/m <sup>3</sup>	128kg/m <sup>3</sup>	160kg/m <sup>3</sup>	192kg/m <sup>3</sup>
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

### Availability and Packaging

FireMaster 607 ALU 40 Blanket is available in a wide variety of thicknesses and densities. See the table below for details.

Standard size: 610mm or 1220mm wide. 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.

#### With standard FireMaster 607 Blanket as the substrate

Density kg/m	6mm	13mm	20mm	25mm	38mm	50mm	63mm	70mm
64	No	Yes	Yes	Yes	Yes	Yes	No	No
96	No	Yes	Yes	Yes	Yes	Yes	Yes	No
128	Yes	Yes	Yes	Yes	Yes	Yes	No	No
160	Yes	Yes	Yes	Yes	Yes	No	No	No
Roll length	21.60m	14.64m	9.76m	7.32m	4.88m	3.66m	2.3m**	2.3m**

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

#### With standard FireMaster 607 Blanket as the substrate

Density kg/m	13mm	20mm	25mm	38mm	50mm	63mm	70mm
96	No	No	Yes	Yes	Yes	Yes	No
128	No	Yes	Yes	Yes	Yes	No	No
160	No	Yes	Yes**	Yes	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.

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