



Features

- UL-classified, noncombustible material
- Lightweight/flexible
- Optional foil facing or encapsulation
- Low thermal conductivity
- Resists chemical attack
- Unaffected by oil or water
- Completely inorganic
- Excellent acoustical properties

Applications

Bulk

- Fill, void, or cavity material in through-penetration seals (firestops)
- Seal duct, cable bundle, conduit, tubing, and cable tray penetrations

Blanket and FP-60 Blanket

- OEM manufactured systems such as fire doors and panels
- Up to 3 hour cable tray, conduit, and through penetration firestops
- Structural steel
- Plastic pipes
- Above ground storage tanks
- Railcar tanks
- Motor Operated Valves

Installation Benefits

- Lightweight, flexible and cuts easily.
- No special tools are required
- Most systems utilize a wrap technique and secure the blanket in place with steel banding. For walls, ceilings, and vertical runs, insulation pins may be used to hold in place

Typical Installation

Penetration opening should be clean and free from loose debris, dirt, oil and wax. Install damming material, such as FireMaster Board, if required. Pack FireMaster Bulk to a firm density, recommended 12 pcf, around the penetrating item to required depth. Trowel on sealant, FireMaster Mastic, depending on UL system and requirement.

Consult the Thermal Ceramics Installation Guide for your application.

FireMaster Bulk is used in UL Systems CAJ1053 and CAJ3032 for pipe and cable bundle penetrations. These UL systems have been tested to ASTM E814/UL1479. For further details, refer to the UL Fire Resistance Directory, Vol. II, or contact Thermal Ceramics. The bulk is a high-temperature fiber which is classified by Underwriters Laboratories (UL) under "Loose Fill Materials (BPHX)" in the UL Building Materials Directory, No. R9464. FireMaster Bulk is used as a fireproof fill, void, or cavity material for several UL systems. It is the base fiber for FireMaster products.

FireMaster Blanket is a high-temperature fiber blanket which is classified by Underwriters Laboratories under "Batts and Blankets (BKNV)" in the UL Building Materials Directory, No. R8418. FireMaster Blanket is manufactured to ensure continued compliance with certification standards. The blanket is used as a fireproof covering or wrap. Foil facing or encapsulation is available in aluminum or stainless steel to reduce the risk of physical damage, minimize dusting, and protect against weathering.

FireMaster FP-60 Blanket is a 1/2" thick 8 pcf density high-temperature fiber blanket with 2 mil aluminum foil facing on both sides of the blanket. Four layers of FP-60 blanket provides 1 hour of protection, UL R11044. The added value of foil provides hose stream protection. FireMaster FP-60 Blanket is manufactured to ensure continued compliance with certification standards.

Testing:

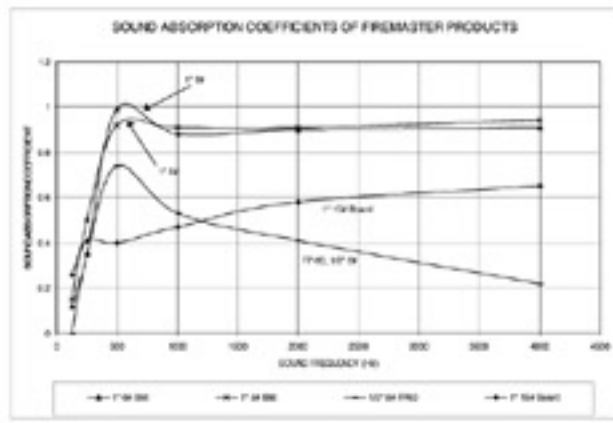
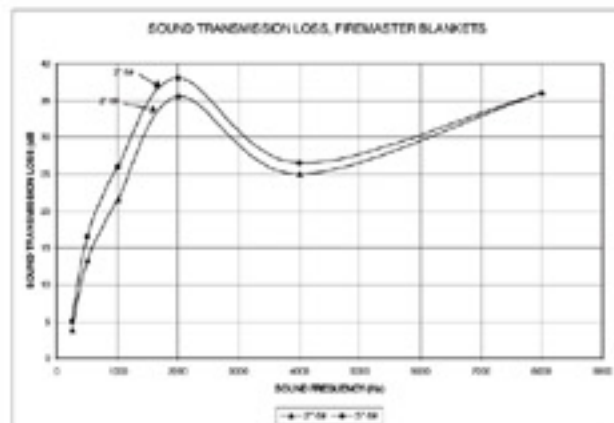
ASTM E119
UL System No. 5



FireMaster Bulk, Blanket, FP-60 Blanket

Product Information

Physical Properties	Bulk	Blanket	FP-60 Blanket
Color	white	white	white
Melting point, °F, (°C)	3200 (1760)	3200 (1760)	3200 (1760)
Service temperature, °F (°C)	2300 (1260)	2300 (1260)	2300 (1260)
Flammability test			
flame spread	0	0	0
smoke developed	0	0	0
fuel contributed	0	0	0
Maximum quantities of water leachable elements, PPM on fiber surface			
Boron	100	100	100
Chlorine	5	5	5
Fluorine	50	50	50
Sulphur	10	10	10
Foils	-	2 & 4 mil aluminum, 2 mil 304 SS	2 mil aluminum
Standard Sizes			
Length, ft (m)	-	25 (7.5)	25 (7.5)
Width, ft (m)	-	2, 4 (0.6, 1.2)	4 (1.2)
Thickness, in (mm)	-	1/2, 1, 1 1/2, 2 (12.5, 25, 37.5, 50)	1/2 (12.5)
Density, pcf (kg/m ³)	-	6, 8 (96, 128)	8 (128)
Square footage (m ²)	-	50, 100 (4.65 - 9.3)	50, 100 (4.65 - 9.3)
Chemical Composition			
Alumina, Al ₂ O ₃	45	45	45
Silica, SiO ₂	53	53	53
Other	2	2	2
Thermal Conductivity, BTU•in/hr•ft ² •°F (W/m•k) (ASTM C201)			
Mean temperature			
@ 100°F (38°C)	-	0.21 (0.03)	0.21 (0.03)
@ 500°F (260°C)	-	0.44 (0.06)	0.44 (0.06)
@ 1000°F (530°C)	-	0.87 (0.13)	0.87 (0.13)
@ 1500°F (810°C)	-	1.45 (0.21)	1.45 (0.21)
@ 2000°F (1093°C)	-	2.09 (0.30)	2.09 (0.30)



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 is a trademark of The Morgan Crucible Company plc.
FP-60 is a trademark of Thermal Ceramics Inc.

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