

Foundry Service & Supplies, Inc.

Maxfire Ceramic Fiber Blanket

SubmittalSheet



Description

Maxfire Ceramic Blanket Products are comprised of high-strength ceramic fibers spun from alumina-silica, mechanically needled and cross-locked through a unique forming process, to produce a resilient blanket with unexcelled handling strength and surface integrity. All Ceramic Blanket Products are completely inorganic and available in a variety of densities, thickness and temperature capabilities. Maxfire Ceramic Blanket Products offer excellent thermal and acoustical performance, high temperature stability, low heat storage, thermal shock resistance and are unaffected by water or oil, with thermal and physical properties restored upon drying.

Applications

- Furnace, kiln, reformer and boiler linings
- Investment casting mold and wrappings
- Removable blankets for field stress relieving
- Reusable insulation for steam and gas turbines
- Flexible high temperature pipe insulation
- Cryogenic insulation
- Primary reformer header insulation
- Incinerator equipment and stack linings
- Annealing cover seals
- Nuclear insulation applications
- Fire protection
- Ceramic fiber modules
- High temperature kiln and furnace insulation
- Furnace door linings and seals
- Soaking pit seals
- Furnace repairs
- Thermal reactor insulation
- Expansion joint packing and seals
- High temperature gaskets
- Glass furnace crown insulation
- High temperature filtration
- Atmosphere furnace lining
- Field steam generator lining
- Appliance insulation

Product Information

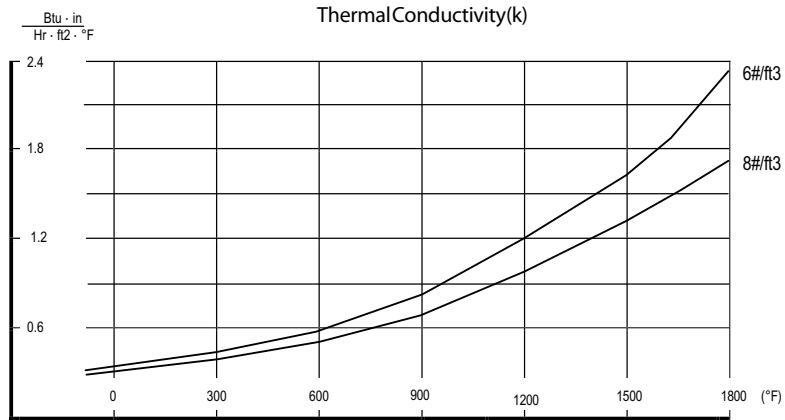
		Products			
		Standard Grade	High Purity	High Alumina	High Zirconia
Chemical Analysis	Al ₂ O ₃ (%)	RT ≥ 46	HP 47 – 49	HT 52 – 57	HTZ ZrO ₂ ≥ 15
	Al ₂ O ₃ + SiO ₂ (%)	≥ 97	≥ 99	≥ 99	Al ₂ O ₃ + SiO ₂ + ZrO ₂ ≥ 99
	Fe ₂ O ₃ (%)	≤ 1.0	≤ 0.2	≤ 0.2	≤ 0.2
	Others (%)	≤ 0.5	≤ 0.2	≤ 0.2	≤ 0.2
Physical Properties	Mean Fiber Diameter (Mic)	2.5 – 3.5	2.5 – 3.5	2.5 – 3.5	2.5 – 3.5
	Densities (lbs/ft ³)	4, 6, 8, 12	6, 8, 12	6, 8, 12	6, 8, 12
	Melting Temperature	2998°F (1648°C)	2998°F (1648°C)	2998°F (1648°C)	2998°F (1648°C)
	Use Temperature Limit*	2192°F (1200°C)	2300°F (1260°C)	2462°F (1350°C)	2600°F (1430°C)
	Shrinkage Rate (%) at Temperature (°F/H)	≤ 3.0 (1832°F X 24 H)	≤ 3.0 (2012°F X 24 H)	≤ 3.0 (2192°F X 24 H)	≤ 3.0 (2462°F X 24 H)
	Tensile Strength (Kpa)	≥ 80	≥ 90	≥ 90	≥ 90
	Thickness (in.)	1/4 - 2	1/4 - 2	1/2 - 2	1/2 - 2

* Users are advised to select the product where the shrinkage rate does not exceed 3% at the required service temperature

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Thermal Performance

All heat flow calculations are based on a surface emissivity factor of 0.90, an ambient temperature of 80°F, and zero wind velocity, unless otherwise stated. All thermal conductivity values have been measured in accordance with ASTM C 177. When comparing similar data, it is advisable to check the validity of all thermal conductivity values and ensure the resulting heat flow calculations are based on the same condition factors. Variations in any of these factors will result in significant differences in the calculated data.



Other Information

Combustibility

Rated noncombustible per ASTM E-136; BS476P4/DIN4102

Surface Burning Characteristics

Flame spread 0; Smoke developed 0, per ASTM E-84

Asbestos

Completely Asbestos Free

Safety First

Follow good safety and industrial hygiene practices during handling and installing of all products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

General

The information presented herein represents typical or average values obtained by ASTM or other standard methods. The values will vary due to normal manufacturing variations. The person using this product must determine its suitability for a particular application.

Foundry Service, Inc. shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

DISTRIBUTED BY:

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For further information on Maxfire products, or other high temperature insulation materials, contact Foundry Service & Supplies, Inc at: 562-945-6511.