



Zircar Zirconia, Inc.
"Manufacturer of the original ZIRCAR products" ©

ALUMINA BLANKET & MAT TYPE Buster



Alumina Mat Type Buster

FEATURES

- Available in Two Different Forms
- Low Thermal Conductivity
- Highly Refractory
- Non-RCF Fibers
- Low Shrinkage up to 1500°C
- 97% Pure Alumina
- Available "Off the Shelf"

Buster Blanket and **Buster Mat** are flexible, Hi-Alpha alumina fiber insulation materials. The mat is 100% fibers while the blanket has been needled into a durable blanket with the addition of an organic fiber reinforcement. Both forms have useful properties up to 1600°C. These polycrystalline fiber blankets offer higher temperature capability, less shrinkage and greater chemical resistance than standard alumina-silica blankets.

Buster Mat exhibits lower thermal conductivity, lower thermal mass and greater thermal shock resistance than all alumina-silica blankets, while also providing a much cleaner insulation. The minor addition of silica modifies the alumina fiber's microcrystalline structure and acts as a grain growth inhibitor and prevents embrittlement that usually occurs in pure alumina after extended use at elevated temperatures. **Buster Mat** resists attack in aggressive chemical environments due to its high purity & refractory nature. It is stable in vacuum, inert, oxidizing or reducing atmospheres.

Buster Blanket is made by needling the Buster Mat with an organic fiber reinforcement. This additional processing results in a much denser, stronger and more durable flexible insulation. It is offered in both 1/2" and 1" standard thicknesses.

Flexible **Buster** products are useful as insulation packing in furnace spaces, around furnace sight tubes & ports and as filler in expansion joints and masonry cracks.

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PROPERTIES & CHARACTERISTICS

	Buster Mat	Buster Blanket
Nominal Composition, Wt%		
Al ₂ O ₃	97	97
SiO ₂	3	3
Organics	0	<3
Trace Elements	<0.5	<0.5
Melting Point, °C (°F)	2038 (3700)	2038 (3700)
Maximum Use Temperature, °C (°F)	1600 (2912)	1600 (2912)
Bulk Density, g/cc (pcf)	0.035 (2.2)	0.096 (6)
Linear Shrinkage, % (6 hrs at 1500°C (2800°F))	<4	<4
Thermal Conductivity, (Parallel to Thickness)		
W/mK (BTU/hr ft ² °F/inch) at 1200°C (2192°F)	0.513 (3.6)	0.315 (2.2)
W/mK (BTU/hr ft ² °F/inch) at 1400°C (2552°F)	0.635 (4.4)	0.395 (2.7)
W/mK (BTU/hr ft ² °F/inch) at 1600°C (2912°F)	0.756 (5.2)	0.476 (3.3)

ORDERING INFORMATION

Please contact our Sales Department for pricing and availability.

Standard Sizes	Item Number
Buster Mat, 18" W x 24" L x 1.33" T Sheet	GM001
Buster Mat, 24" W x 6' L x 1.33" T Roll	GM002
Buster Mat, 24" W x 48.5' L x 1.33" T Roll	GM003
Buster Blanket, 18" W x 24" L x 0.50" T Sheet	GN001
Buster Blanket, 24" W x 6' L x 0.50" T Roll	GN002
Buster Blanket, 24" W x 48' L x 0.50" T Roll	GN003
Buster Blanket, 18" W x 24" L x 1" T Sheet	GN004
Buster Blanket, 24" W x 6' L x 1" T Roll	GN005
Buster Blanket, 24" W x 24' L x 1" T Roll	GN006

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