

CERAMIC FIBER BLANKETS



The following grades of ceramic fiber blanket offered by Diversified Imports, Inc. provide solutions for various high temperature applications. The advantages of the lightweight and thermally efficient ceramic fiber blanket include low heat conductivity and excellent resistance to thermal shock. The ceramic fiber blanket is available in a variety of densities, sizes, and temperature ratings. The higher the density, the greater the handling strength and insulation properties will be at higher temperatures.

Classification Temperature:

ST Ceramic Fiber Blanket	1260°C (2300°F)
HP Ceramic Fiber Blanket	1260°C (2300°F)
HZ Ceramic Fiber Blanket	1430°C (2600°F)

Features:

- High tensile strength and low shrinkage
- Low thermal conductivity and low storage
- Excellent thermal stability and thermal shock resistance
- Excellent erosion resistance
- Excellent heat insulation, fireproofing and processing function

Applications:

- High temperature kiln and furnace insulation
- High temperature gaskets and seals
- Refractory back-up
- Flexible high temperature pipe insulation
- Investment casting mold wrapping
- Glass furnace crown insulation
- Removable insulating blankets for stress relieving welds

TYPICAL PRODUCT PARAMETERS

	ST		HP		HZ	
Physical Properties						
Color	White		White		White	
Maximum Temperature Rating, °C (°F)	1260 (2300)		1260 (2300)		1430 (2600)	
Shot Content, %	≤15		≤15		≤12	
Linear Shrinkage 24 Hrs After Heating, %	≤2.5@1000°C (1832°F)		≤2.5@1100°C (1832°F)		≤3.5@1350°C (1832°F)	
Available Density, kg/m ² (lb/ft ²)	96 (6)	128 (8)	96 (6)	128 (8)	96 (6)	128 (8)
Tensile Strength, MPa (Psi)	0.040 (5.8)	0.050 (7.25)	0.050 (7.25)	0.060 (8.7)	0.050 (7.25)	0.060 (8.7)
Thermal Conductivity, W/m·K (BTU/lb·hr·°F)						
400°C (752°F)	0.090 (0.052)	0.095 (0.055)	0.114 (0.066)	0.124 (0.072)	0.122 (0.071)	0.138 (0.080)
500°C (932°F)	0.119 (0.069)	0.123 (0.071)	0.135 (0.078)	0.145 (0.084)	0.153 (0.089)	0.179 (0.103)
600°C (1112°F)	0.152 (0.088)	0.158 (0.091)	0.191 (0.11)	0.202 (0.117)	0.184 (0.11)	0.233 (0.135)
Chemical Analysis, % Weight						
Al ₂ O ₃	≥44		≥45		≥34	
SiO ₂	≥52		≥54		≥50	
Fe ₂ O ₃ + TiO ₂	≤1.0		≤0.50		≤0.50	
Na ₂ O + K ₂ O	≤1.0		≤0.20		≤0.20	
ZrO ₂	-		-		≥15	

Specifications

1/2" x 24"; 48" x 600"

1" x 24"; 48" x 300"

1-1/2" x 24"; 48" x 200"

2" x 24"; 48" x 150"

*Custom sizes are available

The data shown are average results of tests under standard procedures and are subject to variation. Results should not be used for specification purpose or creating any contractual obligation. For more information on the safety application or material, please refer to the work practices and material safety data sheet.