



# Ceramic Fiber

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FRC Global's ceramic fiber blanket presents unparalleled refractories and thermal insulation due to its long spun fiber needling technique. These blankets offer superior insulating performance, flexibility and resilience. Our ceramic fiber blanket products are unaffected by most chemicals (except hydrofluoric & phosphoric acids and concentrated alkali). Thermal and physical properties are retained after drying following wetting by oil, steam or water. Our ceramic fiber blankets are completely inorganic, so there are no fumes when heating for the first time.

## Features:

- ◆ High tensile strength and Low shrinkage
- ◆ Good resiliency with low heat storage
- ◆ Low thermal conductivity
- ◆ Thermal shock resistance
- ◆ Good sound absorption

## Typical Applications:

- ◆ Annealing furnaces
- ◆ Soaking pit covers and seals
- ◆ Furnace hot face repairs
- ◆ Reheating furnace and ladle covers

## Typical Parameters:

DESCRIPTION	STD RCF Blanket		HP RCF Blanket			HZ RCF Blanket		
<b>CHEMICAL COMPOSITION (%)</b>								
Al <sub>2</sub> O <sub>3</sub>	≥44		≥45			≥34		
SiO <sub>2</sub>	≥52		≥54			≥50		
Fe <sub>2</sub> O <sub>3</sub> + TiO <sub>2</sub>	≤1		≤0.5			≤0.5		
ZrO <sub>2</sub>	-		-			≥15		
K <sub>2</sub> O + Na <sub>2</sub> O	≤1		≤0.2			≤0.2		
<b>PHYSICAL PROPERTIES</b>								
DENSITY (KG/M <sup>3</sup> )	96	128	96	128	160	96	128	160
CLASSIFICATION TEMPERATURE (°C)	1260		1260			1430		
FIBER DIAMETER (um)	3.5		3.5			3.5		
SHOT CONTENT (%)	≤15		≤15			≤12		
LINEAR SHRINKAGE AFTER HEATING (%)	1000°C*24h≤2.5		1100°C*24h≤2.5			1350°C*24h≤3.5		
<b>THERMAL CONDUCTIVITY (W/m.k)</b>								
400 °C	0.090	0.095	0.124	0.114	0.101	0.138	0.122	0.118
500 °C	0.119	0.123	0.145	0.135	0.120	0.179	0.153	0.149
600 °C	0.152	0.158	0.202	0.191	0.175	0.233	0.184	0.172
Tensile Strength (MPa)	0.040	0.050	0.050	0.060	0.075	0.050	0.060	0.075

FRC Global is a leading supplier of refractories, electrodes, and high temperature combustion systems.

We provide outstanding results for our clients within the iron, steel, and non-ferrous industries. Our company's reputation is built by delivering high quality products made with premium raw materials.

Through the use of vast global resources, all of us at FRC Global are committed to being the value creators and problem solvers for our industry.

