



HEADQUARTERS

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Grade PFR Block Specifications

Description: Grade PFR is primarily the material of choice for higher density, better mechanical strength, and less porosity than grade PF. Grade PFR is the most popular multi-purpose grade.

Typical applications:

- Casting molds and furnace parts for hot metal
- Boats and trays for sintering applications
- Crucibles for melting and alloying.
- Ingot Molds

Standard Sizes: 16 x 25 x 72", 20 x 20 x 72", 20 x 25 x 72"
16 x 32 x 72", 20 x 32 x 100",
20 x 37 x 74", 20 x 37 x 110"

Properties	Test Standard	English		Metric	
		UOM		UOM	
Bulk Density	ASTM C-838	lbs/ft ³	108	g/cm ³	1.72
Particle Size	ASTM C-559	inches	0.031	mm	0.8
Electrical Resistivity	ASTM C-830	Ωinch	3.25	μΩm	8.5
Flexural Strength	ASTM C-651	psi	2300	MPa	16
Compressive Strength	ASTM C-695	psi	5100	MPa	35
Tensile Strength	ASTM C-565	psi	1900	MPa	13
Porosity	ASTM C-611	%	18	%	18
Coefficient of Thermal Expansion (to 100°C)	ASTM E-228	10-6/°F	1.4	10-6/°C	2.5
Thermal Conductivity	ASTM C-201	Btu-ft/hr-ft ² °F	90	W/mK	160
Ash Content	ASTM C-561	%	.12	%	.12
Hardness		Rockwell "R"	80		80

The above data should be regarded as general information, not guaranteed specification limits.