



**HEADQUARTERS**

5628 Clifford Circle • Birmingham, AL 35210 U.S.A.  
TELEPHONE +1 (866) 472-1861 • FAX +1 (205) 838-0822

**Grade PFR-N Block Specifications**

**Description:** Grade PFR-N, is primarily the material of choice for higher density, better mechanical strength, and less porosity than grade PFR. Grade PFR-N is 10-15% higher in strength than PFR.

**Typical applications:**

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

**Standard Sizes:** 16 x 44 x 86", 20 x 25 x 72",  
20 x 37 x 74", 20 x 37 x 110",

Properties	Test Standard	English		Metric	
		UOM		UOM	
Bulk Density	ASTM C-838	lbs/ft <sup>3</sup>	109	g/cm <sup>3</sup>	1.75
Particle Size	ASTM C-559	inches	0.031	mm	0.8
Electrical Resistivity	ASTM C-830	Ωinch	3.1	μΩm	8.0
Flexural Strength	ASTM C-651	psi	2750	MPa	19
Compressive Strength	ASTM C-695	psi	5650	MPa	39
Tensile Strength	ASTM C-565	psi	2000	MPa	14
Porosity	ASTM C-611	%	17	%	17
Coefficient of Thermal Expansion (to 100°C)	ASTM E-228	10-6/°F	1.3	10-6/°C	2.4
Thermal Conductivity	ASTM C-201	Btu-ft/hr-ft <sup>2</sup> °F	90	W/mK	160
Ash Content	ASTM C-561	%	0.08	%	0.08
Hardness		Rockwell "R"	85		85

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