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**HEADQUARTERS**

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## Cathode & Sidewall Block Specifications

**Description:** Our grade, GBG-73, is primarily made from anthracite coal. The grade is 70% ECA and 30% Graphite. In producing this grade, it is formed by vibration and heat treated by baking.

Properties	UOM	Test Standard	GBG-73	
			Min	Max
Real Density	g/cm <sup>3</sup>	ASTM C-838	1.94	2.00
Bulk Density	g/cm <sup>3</sup>	ASTM C-559	1.58	1.66
Porosity	%	ASTM C-830	-	16
Compressive Strength	N/mm <sup>2</sup>	ASTM C-695	24	-
Flexural Strength	N/mm <sup>2</sup>	ASTM C-651	8	-
Young's Modulus	N/mm <sup>2</sup>	ASTM C-747	-	10
Electrical Resistivity	μΩm	ASTM C-611	25	37
Coefficient of Thermal Expansion	1/K•10 <sup>-6</sup>	ASTM E-228	-	3.8
Thermal Conductivity @ 30°C	W/mK	ASTM C-201	12	-
Ash Content	%	ASTM C-561	-	4
Sodium Expansion	%	Rapoport	-	0.7

Note: Tolerances to be confirmed per customer drawings