

Insulation Concret PFB -03, PFB -04

3.3 Prefabricated Concrete Parts: Grade PFB-03		
Essential properties and characteristics for grade PFB-03		
Classification Temperature EN ISO 1927-1	°C	≥ 1400
Bulk Density (24 hour at 110°C) EN ISO 1927-6	g/cm3	≥ 1.6
Cold Crushing Strength(5houre at 1300 °C)	Mpa	≥ 20
Thermal Conductivity ASTM C417-05 400	W/mK	≤ 0.4
600		≤ 0.45
1000		≤ 1.4
Permanent Linear Change (5 hours at 1300°C) EN ISO 1927-6	%	-0.5≤ PLC≤+1
Disintegration in CO (at 200h,500°C) ASTM C288 – 87 / EN ISO 12676	classification	A
Thermal Shock Resistance DIN 51068, water quenching	cycle	≥ 15
Apparent Porosity (24h at 110) ENISO 1927-6	%	30-40
Thermal Expansion 20°C – 1000°C EN 993-19	%	≤ 0.7
Thermal Conductivity ASTM C417-05 200	W/Mk	≤ 0.4
Chemical Analysis EN ISO 1927-3	wt%	
AL2O3	%	≥ 40
Fe2O3	%	≤ 1.5
SIO2		40-45
CaO		6-9
Bound		Hydraulic

3.4 Prefabricated Concrete Parts: Grade PFB-04		
Essential properties and characteristics for grade PFB-04		
Classification Temperature EN ISO 1927-1	°C	≥ 1100
Bulk Density (24 hour at 110°C) EN ISO 1927-6	g/cm3	≤ 1.4
Cold Crushing Strength(10houre at 1000 °C) EN ISO 1927-6	MPa	≥ 2
Permanent Linear Change 5 hours at 1000°C EN ISO 1927-6	%	-0.5≤ PLC≤+1
Thermal Conductivity ASTM C417-05 200	W/Mk	≤ 0.31
600		≤ 0.33
800		≤ 0.35
1000		≤ 0.4
Apparent Porosity (24h at 110) EN ISO 1927-6	%	50-60
Thermal Expansion(20°C – 1000°C) EN 993-19	%	≤ 0.6
Chemical Analysis EN ISO 1927-3		
AL2O3	Wt%	≥40
SiO2		40- 45
Fe2O3		≤ 1.7
CaO		10-15
Bond		Hydraulic

BOM 1009							
	UNIT	Total	Designation	QUALITY	Type	Drawing No.	Total kg
	PCS	5	Prefabricated Element	PFB-03+PFB-04+S235+1.4841	101	ZN-239770	2,926
	PCS	35	Prefabricated Element	PFB-03+PFB-04+S235+1.4841	102	ZN-239982	14,349
	PCS	29	Prefabricated Element	PFB-03+PFB-04+S235+1.4841	103	ZN-240059	16,797
	PCS	5	Prefabricated Element	PFB-03+PFB-04+S235+1.4841	104	ZN-242097	2,518
		74					36,590

Prefabricated Top Blocks: Grade PFB-03,04		PCS	Kg
Prefabricated Element	PFB-03+PFB-04+S235+1.4841	74	36,560