

Typical Data
Zelieblok

		1900S	2000S
Maximum Surface Temperature	°C	1000	1100
	°F	1832	2012
Bulk Density	(kg/m ³)	14	16.2
	dry lb/in ³	225	260
Density ASTM C 134	lb/ft ³	39	44
	kg/m ³	(625)	(705)
	lb/BEq	2.3	2.6
Modulus of Rupture ASTM C 133	MPa	1.9	1.2
	lb/in ²	275.5	174
Comprehensive Strength	MPa	2.6	1.6
	lb/in ²	377	232
Linear Shrinkage % 12 hrs at 1050°C 950	%		
		1.0	1.0
Reversible Linear Thermal Expansion at 2000°F (1093°C)	%		
		0.06	0.06
Thermal Conductivity ASTM C-182			
Mean Temperature, °F (°C)			
200 °C	W/m ² K	0.06	0.07
400 °C	W/m ² K	0.08	0.09
600 °C	W/m ² K	0.10	0.10
392 °F	Btu-in/ft ² , hr °F	0.42	0.49
752 °F	Btu-in/ft ² , hr °F	0.55	0.62
1112 °F	Btu-in/ft ² , hr °F	0.69	0.69
To convert Btu-in/ft ² , hr, °F to Kcal-m ² ,hr, °C, multiply by 0.124.			
Chemical Analysis			
		%	
Alumina – Al ₂ O ₃		0.2	0.3
Silica – SiO ₂		45	47.0
Ferric Oxide – Fe ₂ O ₃		0.2	0.3
Sodium Oxide – Na ₂ O		0.7	0.1
Calcium Oxide – CaO		45.0	45.0
Magnesium Oxide – MgO		0.1	0.6
Potassium oxide — K ₂ O		0.2	0.1
Loss on ignition, 1025°C		8	6