

	CT 35		CT 45	
MECHANICAL PROPERTIES				
Bulk density (EN 1094-4) (± 10%)				
	kg/m ³	1000		1050
	lbs/cu.ft.	62		66
Compressive strength (EN 1094-5)				
	MPa	24		30
	lbs/sq.in.	3480		4350
Flexural strength (EN 12089)				
	MPa	13		15
	lbs/sq.in.	1885		2175
Hardness (DIN 53505)				
	Shore D	> 70		> 70
THERMAL PROPERTIES				
Service temperature				
	°C	1000		1000
	°F	1832		1832
Shrinkage after 12 h (EN 1094-6)				
Length-width / thickness	@ 750°C (1382°F)	%	0,3/0,8	0,3/2,0
	@ 1000°C (1832°F)	%	0,4/1,7	0,35/2,5
Thermal conductivity (EN 993-14)				
mean temperature	@ 400°C	W/(mK)	0,24	0,25
	@ 600°C	W/(mK)	0,25	0,27
	@ 800°C	W/(mK)	0,28	0,29
	@ 752°F	BTU/(sq.ft.h°F/in)	1,66	1,73
	@ 1112°F	BTU/(sq.ft.h°F/in)	1,73	1,87
	@ 1472°F	BTU/(sq.ft.h°F/in)	1,94	2,01
Specific heat capacity				
		kJ/(kgK)	1,0-1,2	0,9-1,1
		BTU/(lb°F)	0,24-0,29	0,22-0,26
Coefficient of thermal expansion				
	@ 900°C	K ⁻¹	5,9x10 ⁻⁶	5,0x10 ⁻⁶
	@ 1652°F	°F ⁻¹	3,3x10 ⁻⁶	2,8x10 ⁻⁶
ELECTRICAL PROPERTIES				
Electric Strength (DIN EN 60243-1)				
	kV / mm	2,5		3,9
High Voltage And Low Current (DIN EN 61621-1)				
	s	> 300 (stage 20; 20 mA)		345 (stage 30; 30 mA)
Volume Resistivity (DIN IEC 60093)				
	@ 25°C (77°F)	Ω / cm	2,3 x 10 ¹³	1,2 x 10 ¹¹
	@ 600°C (1112°F)	Ω / cm	1,4 x 10 ⁷	8,5 x 10 ⁷
Surface Resistivity (DIN IEC 60093)				
	@ 25°C (77°F)	Ω	3,1 x 10 ¹⁴	8,6 x 10 ¹¹
	@ 600°C (1112°F)	Ω	2,0 x 10 ⁸	1,1 x 10 ⁹
Relative Permittivity (VDE 0303 part 4)				
	@ 25°C (77°F)		2,9	2,9
Dissipation Factor; tan δ (VDE 0303 part 4)				
	@ 25°C (77°F)		0,33	0,11
Comparative Tracking And Proof Indices; CTI (DIN EN 60112)				
			> 500	> 600
CHEMICAL PROPERTIES				
Chemical composition				
	Calciumsilicate	%		90
	CaO-; MgO-; Al ₂ O ₃ -silicates	%	95 - 97	
	R _x O _x ; (R=Fe, Ti, K, Na)	%	1	1
	Loss on ignition (L.O.I.)	%	3-3.5	9
DIMENSIONS				
Standard sizes; both sides sanded, untrimmed				
		mm		inches
Length		1500 / 3000		59.06 / 118.11
Width		1250		49.21
Thickness		12.7, 19.1, 25.4, 31.8, 38.1, 50.8 76.2, 101.6		½; ¾, 1¼, 1½, 2, 3, 4
Dimensional tolerances				
		mm		inches
Length		0 / + 15		0 / + 0.59
Width		0 / + 8		0 / + 0.31
Thickness		0 / + 0,8		0 / + 0.03

These values are tested in accordance with standards. They represent typical average values, but are subject to variations of raw materials and production variances. We are not liable for damages, connected with the use of our products. Misprints and errors excepted.

General remarks

Large sections should be supported by using adequate support systems. CALSITEC® can be mechanically fixed using glue and/or screws. CALSITEC® must be stored in dry environment. For additional information please contact CALSITHERM Silikatbaustoffe GmbH