

		SILCAL® 900	SILCAL® 1000	SILCAL® 1100	MICROCAL® 1100
MECHANICAL PROPERTIES					
Bulk Density (EN 1094-4)					
(± 10%)	kg/m ³	260	255	255	260
	lbs/cu.ft.	16	16	16	16
Open Porosity (in acc. to EN 1094-4)					
	%	90	90	90	90
Compressive Strength (EN 1094-5)					
	MPa	1,5	1,6	1,6	1,2
	lbs/sq.in.	217,5	232	232	174
THERMAL PROPERTIES					
Service temperature					
	°C	900	1000	1100	1100
	°F	1652	1832	2012	2012
Change in dimensions on heating (EN 1094-6)					
Length-width	%	-1,7	-1,7	-1,5	-1,3
	@ °C	900	1000	1050	1050
	@ °F	1652	1832	1922	1922
Thermal conductivity (EN 993-14)					
	@ 400°C W/(mK)	0,12	0,12	0,12	0,09
	@ 600°C W/(mK)	0,15	0,15	0,14	0,11
	@ 800°C W/(mK)	0,18	0,17	0,17	0,13
	@ 752°F BTU/(sq.ft.h°F/in)	0,83	0,83	0,83	0,62
	@ 1112°F BTU/(sq.ft.h°F/in)	1,04	1,04	0,97	0,76
	@ 1472°F BTU/(sq.ft.h°F/in)	1,25	1,18	1,18	0,90
Specific heat capacity					
	kJ/(kgK)	0,8-1,2	0,8-1,2	0,8-1,2	0,8-1,2
	BTU/(lb°F)	0,19-0,29	0,19-0,29	0,19-0,29	0,19-0,29
Coefficient of thermal expansion					
20°C - 700°C (68°F - 1292°F)	K ⁻¹	5,5x10 ⁻⁶	5,5x10 ⁻⁶	5,5x10 ⁻⁶	5,5x10 ⁻⁶
	°F ⁻¹	3,1x10 ⁻⁶	3,1x10 ⁻⁶	3,1x10 ⁻⁶	3,1x10 ⁻⁶
CHEMICAL PROPERTIES					
Chemical analysis, typical					
	CaO	% 45 - 46	46 - 47	46 - 47	36 - 38
	SiO ₂	% 44 - 45	44 - 45	44 - 45	45 - 47
	Al ₂ O ₃	% 0,2	0,2	0,2	0,3
	Fe ₂ O ₃	% 0,1	0,1	0,1	0,2
	MgO	% 0,5	0,5	0,5	0,4
	ZrO ₂	% -	-	-	5 - 10
	Na ₂ O + K ₂ O	% 0,2	0,2	0,2	0,2
	Loss on ignition (L.O.I)	% 9	9	8	7
DIMENSIONS					
Standard sizes		mm		inches	
Length		500 , 1000		19.68 , 39.37	
Width		1250		49.21	
Thickness		25 through 100		1 through 4	
Maximum sizes up to (length / width / thickness)		3000 / 1250 / 110		118.11 / 49.21 / 4.33	
Dimensional tolerances		mm		inches	
Length		± 5		± 0.2	
Width		± 3		± 0.12	
Thickness		± 2		± 0.08	

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. SILCAL® & MICROCAL® can be mechanically fixed using glue and/or screws. SILCAL® & MICROCAL® must be stored in dry environment. For additional information please contact CALSITHERM Silikatbaustoffe GmbH.