

## Appendix IV – Description of the test item

**SILCA®**

Fire protection

			SILCA 260 MC
<b>MECHANICAL PROPERTIES</b>			
Bulk Density (EN 1094-4)			
(± 10%)	kg/m <sup>3</sup>		260
	lbs/cu.ft.		16
Open Porosity (in acc. to EN 1094-4)			
	%		90
Compressive Strength (EN 1094-5)			
	MPa		2
	lbs/sq.in.		290
Flexural Strength (EN 12086)			
	MPa		0,8
	lbs/sq.in.		116
<b>THERMAL PROPERTIES</b>			
Service temperature			
	°C		950
	°F		1742
Change in dimensions on heating (EN 1094-6)			
Length-width			
	%		-0,8
	°C	@	900
	°F	@	1652
Thermal conductivity (EN 993-14)			
	@ 400°C	W/(mK)	0,10
	@ 600°C	W/(mK)	0,12
	@ 800°C	W/(mK)	0,15
	@ 752°F	BTU/(sq.ft.h°F/in)	0,69
	@ 1112°F	BTU/(sq.ft.h°F/in)	0,83
	@ 1472°F	BTU/(sq.ft.h°F/in)	1,04
Specific heat capacity			
		kJ/(kgK)	0,8-1,2
		BTU/(lb°F)	0,19-0,29
Coefficient of thermal expansion			
20°C - 700°C (68°F - 1292°F)			
		K <sup>-1</sup>	5,5x10 <sup>-6</sup>
		°F <sup>-1</sup>	3,1x10 <sup>-6</sup>
<b>CHEMICAL PROPERTIES</b>			
Chemical analysis, typical			
	CaO	%	36 - 38
	SiO <sub>2</sub>	%	45 - 47
	Al <sub>2</sub> O <sub>3</sub>	%	0,3
	Fe <sub>2</sub> O <sub>3</sub>	%	0,2
	MgO	%	0,4
	ZrO <sub>2</sub>	%	5 - 10
	Na <sub>2</sub> O + K <sub>2</sub> O	%	0,2
	Loss on ignition (L.O.I.)	%	8
<b>DIMENSIONS</b>			
Standard sizes			
		mm	
Length		500 , 1000	
Width		1250	
Thickness		25 through 100	
Maximum sizes up to (length / width / thickness)		3000 / 1250 / 110	
Dimensional tolerances			
		mm	
Length		± 5	
Width		± 3	
Thickness		± 2	

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

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