

SKAMOL SUPER-1100 E calcium silicate insulating slabs

for back-up insulation up to 1100°C (2012°F)



Grade	SUPER-1100 E	
Maximum service temperature EN 1094-6 (ASTM C-356)		
	°C	1100
	°F	2012
Bulk density, dry		
	kg/m ³	245
	lbs/cu.ft.	15.3
Compressive strength EN 1094-5 (ASTM C-165)		
@ room temperature	MPa	2.7
	lbs/sq.in.	392
Modulus of rupture EN 993-6 (ASTM C-133)		
	MPa	1.8
	lbs/sq.in.	261
Total porosity EN 1094-4 (ASTM C-830)		
	%	90
Permeability to air EN 993-4 (ASTM C-830)		
	nPm	0.5
Creep in compression EN 993-9 (ASTM C-832)		
50 h at 900°C (1652°F), load 0.1 MPa (14.5 lbs/sq.in.)	%	0.4
Specific heat		
	kJ/(kg×K)	0.84
	BTU/(lb×°F)	0.20
Coefficient of reversible thermal expansion BS-1902: section 5.3 (ASTM C-832)		
@ 20°C-750°C (68°F-1382°F)	K ⁻¹	5.5x10 ⁻⁶
	°F ⁻¹	3.1x10 ⁻⁶
Linear reheat shrinkage EN 1094-6 (ASTM C-356)		
12 h at 50°C (90°F) below max. service temp.	%	1.5
Pyrometric cone equivalent ASTM C24-89 ORTON cones		
	°C	1345
	°F	2453
Thermal conductivity ASTM C-182		
mean temp. @ 200°C	W/(m×K)	0.08
@ 400°C		0.10
@ 600°C		0.12
@ 392°F	BTU/(sq.ft×h×°F/in)	0.55
@ 752°F		0.69
@ 1112°F		0.83
Chemical analysis, typical		
	%	
Silica	SiO ₂	47
Alumina	Al ₂ O ₃	0.3
Ferric oxide	Fe ₂ O ₃	0.3
Magnesium oxide	MgO	0.6
Calcium oxide	CaO	45
Sodium oxide	Na ₂ O	0.1
Potassium oxide	K ₂ O	0.1
Loss on ignition 1025°C (1877°F)	LOI	6
Colour		Grey
HS Tariff number		
(Harmonized Commodity Description and Coding System)		6806.90.00

Skamol A/S
 Østergade 58-60
 DK-7900 Nykøbing Mors
 Denmark
 Tel: +45 9772 1533
 Fax: +45 9772 4975
 insulation@skamol.dk

www.skamol.com

Note: All testing is performed according to European standard .
 For easy reference, the equivalent ASTM standard is stated as applicable.

Data are average results of tests conducted under standard procedures and are subject to variation. Data contained in this data sheet are supplied in good faith as a technical service and are subject to change without notice. Misprint and errors excepted