

SKAMOL SUPER-1100 E calcium silicate insulating boards
for back-up insulation up to 1100°C (2012°F)



Grade	SUPER-1100 E	
Maximum service temperature		
	°C	1100
	°F	2012
Bulk density, dry		
	kg/m ³	245
	lbs/cu.ft.	15.3
Compressive strength (EN 1094-5: 1995)		
@ room temperature	MPa	2.7
	lbs/sq.in.	392
Modulus of rupture (EN 993-6: 1995)		
	MPa	1.3
	lbs/sq.in.	188.5
Total porosity		
	%	90
Permeability to air (BS EN 993-4: 1995)		
	nPm	0.5
Creep in compression (EN 993-9: 1997)		
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: 1990)		
@ 20°C-750°C (68°F-1382°F)	K ⁻¹	5.5x10 ⁻⁶
	°F ⁻¹	3.1x10 ⁻⁶
Linear reheat shrinkage (EN 1094-6: 1999)		
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
@ 800°C		0.14
@ 392°F	BTU/(sq.ft×h×°F/in)	0.55
@ 752°F		0.69
@ 1112°F		0.83
@ 1472°F		0.97
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

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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.

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