

SUPER-ISOL Calcium Silicate insulating boards

for back-up insulation - up to 1000°C (1832°F)



Maximum service temperature		
	°C	1000
	°F	1832
Bulk density, dry		
	kg/m ³	225
	lbs/cu.ft.	14
Compressive strength (EN 1094-5: 1995) @ room temperature	MPa	2.6
	lbs/sq.in.	377
Modulus of rupture (EN 993-6: 1995)		
	MPa	1.9
	lbs/sq.in.	275.5
Total porosity		
	%	91
Permeability to air (BS EN 993-4: 1995)		
	nPm	0.7
Creep in compression (EN 993-9: 1997) 50h at 900°C (1652°F) load 0.1 MPa (14.5 lbs/sq.in.)		
	%	0.5
Specific heat		
	kJ/(kg×K)	0.84
	BTU/(lb×°F)	0.2
Coefficient of reversible thermal expansion (BS 1902: section 5.3: 1990) @ 20°C-750°C (68°F-1382°F)		
	K ⁻¹	5.5×10 ⁻⁶
	°F ⁻¹	3.1×10 ⁻⁶
Linear reheat shrinkage (EN 1094-6: 1999) 12h at 50°C (122°F) below max. service temp.		
	%	1.0
Pyrometric cone equivalent (ASTM C24-89 ORTON cones)		
	°C	1345
	°F	2453
Thermal conductivity (ASTM C-182)		
mean temp. @ 200°C	W/(m×K)	0.06
mean temp. @ 400°C	W/(m×K)	0.08
mean temp. @ 600°C	W/(m×K)	0.10
mean temp. @ 392°F	BTU/(sq.ft.×h×°F/in.)	0.42
mean temp. @ 752°F	BTU/(sq.ft.×h×°F/in.)	0.55
mean temp. @ 1112°F	BTU/(sq.ft.×h×°F/in.)	0.69
Chemical analysis, typical		
	%	
Silica	SiO ₂	45
Alumina	Al ₂ O ₃	0.2
Ferric oxide	Fe ₂ O ₃	0.2
Magnesium oxide	MgO	0.7
Calcium oxide	CaO	45
Sodium oxide	Na ₂ O	0.1
Potassium oxide	K ₂ O	0.2
Loss on ignition 1025°C (1877°F)	LOI	8
Colour		Grey

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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.

Skamol A/S is DS/EN ISO 9001 certified.