

# SKAMOL SUPER-ISOL calcium silicate insulating boards

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



Grade	SUPER-ISOL	
<b>Maximum service temperature (EN 14306:2009)</b>		
	°C	1000
	°F	1832
<b>Bulk density, dry (EN 1094-4)</b>		
	kg/m <sup>3</sup>	225
	lbs/cu.ft.	14
<b>Compressive strength (EN 1094-5: 1995)</b>		
@ room temperature	MPa	2.6
	lbs/sq.in.	377
<b>Modulus of rupture (EN 993-6: 1995)</b>		
	MPa	1.3
	lbs/sq.in.	189
<b>Total porosity (EN 1094-4:1995)</b>		
	%	91
<b>Permeability to air (BS EN 993-4: 1995)</b>		
	nPm	0.7
<b>Creep in compression (EN 993-9: 1997)</b>		
50 h at 900°C (1652°F), load 0.1 MPa (14.5 lbs/sq.in.)	%	0.5
<b>Specific heat</b>		
	kJ/(kg×K)	0.84
	BTU/(lb×°F)	0.20
<b>Coefficient of reversible thermal expansion (BS 1902: section 5.3: 1990)</b>		
@ 20°C-750°C (68°F-1382°F)	K <sup>-1</sup>	5.5x10 <sup>-6</sup>
	°F <sup>-1</sup>	3.1x10 <sup>-6</sup>
<b>Linear reheat shrinkage (EN 1094-6: 1999)</b>		
12 h at 50°C (90°F) below max. service temp.	%	1.0
<b>Pyrometric cone equivalent (ASTM C24-89 ORTON cones)</b>		
	°C	1345
	°F	2453
<b>Thermal conductivity (ASTM C-182)</b>		
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
<b>Chemical analysis, typical</b>		
	%	
Silica	SiO <sub>2</sub>	45
Alumina	Al <sub>2</sub> O <sub>3</sub>	0.2
Ferric oxide	Fe <sub>2</sub> O <sub>3</sub>	0.2
Magnesium oxide	MgO	0.7
Calcium oxide	CaO	45
Sodium oxide	Na <sub>2</sub> O	0.1
Potassium oxide	K <sub>2</sub> O	0.2
Loss on ignition 1025°C (1877°F)	LOI	8
<b>Non-combustibility tests (EN 13501-1:2007 + A2:2009)</b>		
Classification	Class A2-s1,d0 non-combustible	
<b>HS Tariff number</b>		
(Harmonized Commodity Description and Coding System)	6806.90.00	
<b>Colour</b>	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.

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