



# SKAMOL V-1100 (700) vermiculite insulating board

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



Grade	V-1100 (700)	
<b>Maximum service temperature</b>		
	°C	1100
	°F	2012
<b>Bulk density, dry</b>		
	kg/m <sup>3</sup>	700
	lbs/cu.ft.	43.8
<b>Compressive strength (EN 1094-5: 1995)</b>		
@ room temperature	MPa	4.5
	lbs/sq.in.	653
<b>Modulus of rupture (EN 993-6: 1995)</b>		
	MPa	2.0
	lbs/sq.in.	290
<b>Total porosity</b>		
	%	74
<b>Specific heat</b>		
	kJ/(kg×K)	0.94
	BTU/(lb×°F)	0.224
<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>	11×10 <sup>-6</sup>
	°F <sup>-1</sup>	6.1×10 <sup>-6</sup>
<b>Resistance to thermal shock (EN 993-11: 1998)</b>		
heating to 950°C (1742°F)	cycles	> 10
<b>Linear reheat shrinkage (EN 1094-6: 1999)</b>		
12 h at 1000°C (1832°F)	%	1.1
<b>Pyrometric cone equivalent (ASTM C24-89 ORTON cones)</b>		
	°C	1300
	°F	2372
<b>Thermal conductivity (ASTM C-182)</b>		
mean temp. @ 200°C	W/(m×K)	0.19
@ 400°C		0.20
@ 600°C		0.21
@ 392°F	BTU/(sq.ft.×h×°F/in)	1.28
@ 752°F		1.35
@ 1112°F		1.42
<b>Chemical analysis, typical</b>	%	
Silica	SiO <sub>2</sub>	46
Titanium dioxide	TiO <sub>2</sub>	0.7
Ferric oxide	Fe <sub>2</sub> O <sub>3</sub>	5.5
Alumina	Al <sub>2</sub> O <sub>3</sub>	7.0
Magnesium oxide	MgO	19
Calcium oxide	CaO	3.5
Sodium oxide	Na <sub>2</sub> O	0.2
Potassium oxide	K <sub>2</sub> O	10
Loss on ignition 1025°C (1877°F)	LOI	7.0
<b>Colour</b>		SAND

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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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