



## SKAMOTEC 225

for building fireplace surrounds and mold remediation

### Description

SKAMOTEC 225 is a lightweight non-combustible board that provides total fire protection for residential and commercial buildings.

With an excellent R-value, high mechanical strength and low thermal conductivity, this material is ideally suited for building fireplace surrounds and interior insulation / mold remediation.

The advantage of Skamotec 225: It eliminates the use of traditional frame construction, making it easier and faster to install, for labor-saving efficiency.

### Performance Benefits

- Fire protection, non-combustible
- Excellent insulation value
- Maximum service temperature 1000°C (1832°F)
- Ease of installation; lightweight and rigid
- Easy to shape with ordinary woodworking tools
- Ideal for renovation additions and new construction
- Mold protection
- Good moisture permeability
- Good capillarity action
- Environmentally friendly

### CE marking

SKAMOTEC 225 boards are delivered with CE marking according to class A1 non-combustible (DIBt Z-43.14-196).

### Standard sizes

Metric	
Length x width: 1000 x 610 mm 1220 x 1000 mm	Thickness: 25 through 100 mm
2040 x 1220 mm 2440 x 1220 mm	25 through 55 mm
US/British	
Length x width: 39" x 24" 48" x 39"	Thickness: 1" through 2.4"
80" x 48" 96" x 48"	1" through 2.2"

Special sizes are made to order. Sanding on request.

### Dimensional tolerances

Length and width ..... ± 2.5 mm (0.10")  
 Thickness ..... ± 1.5 mm (0.06")  
 - sanded one side (min. 50 mm) ..... ± 0.5 mm (0.02")  
 - sanded both sides ..... ± 0.3 mm (0.01")

### Weight

At thickness 25.4 mm (1.0")..... 5.663 kg/m<sup>2</sup> (1.16 lb/ft<sup>2</sup>)



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Grade		SKAMOTEC 225
<b>Maximum service temperature</b>		
	°C	1000
	°F	1832
<b>Bulk density, dry</b>		
	kg/m <sup>3</sup>	225
	lbs/cu.ft.	14
<b>Compressive strength (EN 1094-5: 1995)</b>		
@ room temperature	MPa	2.8
	lbs/sq.in.	406
<b>Modulus of rupture (EN 993-6: 1995)</b>		
	MPa	1.4
	lbs/sq.in.	203
<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>Coefficient of hygric expansion (DTI report)</b>		
@ 23°C 50%RH to 23°C 10%RH	mm/(m%RH)	4.0x10 <sup>-3</sup>
<b>Coefficient of hygric contraction (DTI report)</b>		
@ 23°C 50%RH to 23°C 100%RH	mm/(m%RH)	0
<b>Sound reduction index</b>		
Thickness 19 mm	dB	24
38 mm		27
40 mm		29
<b>Thermal conductivity (ASTM C-182)</b>		
mean temp. @ 20°C	W/(m×K)	0.06
@ 200°C		0.08
@ 400°C		0.10
@ 600°C		0.12
@ 68°F	BTU/(sq.ft×h×°F/in)	0.42
@ 392°F		0.55
@ 752°F		0.69
@ 1112°F		0.83
<b>Chemical analysis, typical</b>		
Silica	SiO <sub>2</sub>	45
Calcium oxide	CaO	45
Loss on ignition 1025°C (1877°F)	LOI	8
<b>Water content</b>		
	%	2.5
<b>Non-combustibility tests</b>		
	ISO 1182:1990 - NT FIRE 001 - DS 1057.1 - DiBt Z-43.14-196	
<b>HS Tariff number</b>		
(Harmonized Commodity Description and Coding System)		6806.90.00
<b>Colour</b>		
		GREY

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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