

### General Description

PROMATECT® 100 comprises autoclaved calcium silicate spheres (PROMAXON® – a synthetic hydrated calcium silicate in spherical form), bound in a mineral matrix. PROMAXON® technology provides excellent fire performance in most applications.

PROMATECT® 100 is off-white in colour and has a smooth finish on one face with a sanded reverse face. PROMATECT® 100 provide architectural surface ready to receive most forms of decoration.

PROMATECT® 100 is resistant to the effects of moisture and will not physically deteriorate when used in damp or humid conditions. Performance characteristics are not degraded by age or moisture.

A health and safety data sheet is available from the Promat Technical Department and, as with any other materials, should be read before working with the board. The board is not classified as a dangerous substance so no special provisions are required regarding the carriage and the disposal of the product to landfill. They can be placed in an on-site skip with other general building waste which should then be disposed by a registered contractor.



### Typical Mechanical Properties

Flexural strength, $F_{rupture}$ (BS EN 310: 1993)	Longitudinal (dry)	N/mm <sup>2</sup>	4.5
Tensile strength, $T_{rupture}$ (BS5669: Part 1: 1989)	Longitudinal	N/mm <sup>2</sup>	1.02
	Transverse	N/mm <sup>2</sup>	0.98
Compressive strength (average, perpendicular on board face) (BS5669: Part 1: 1989)		N/mm <sup>2</sup>	5.99

### Applications

- Ceilings
- Partitions
- Cavity barriers
- Fire doors
- Structural steel (Australia only)

### General Technical Data

Product generic description		PROMAXON® mineral board				
Material class		Non-combustible to DIN4102: Part 1, BS476: Part 4 and AS1530: Part 1.				
Surface spread of flame		Class 1 to BS476: Part 7 and AS/NZ 53837: 1998 cone calorimeter test group 1.				
Building regulations classification		Class 0				
Nominal density at EMC* (average)		kg/m <sup>3</sup>	850 nominal (dry)			
Alkalinity (approximately)		pH	9 nominal			
Thermal conductivity (approximately) at 40°C (ASTM C518: 1991)		W/m <sup>2</sup> K	0.164			
Coefficient of expansion		m/mk	-16.0 x 10 <sup>-6</sup>			
Typical moisture content (dry at 40°C)		%	2			
Thickness tolerance of standard boards		mm	± 0.5			
Length x width tolerance of standard boards		mm	± 0-3			
Surface condition		Front face: smooth Back face: dimple pattern				
Thickness (mm)	Standard dimensions** (mm x mm)	Number of boards per pallet	Surface per pallet (m <sup>2</sup> /pallet)	Weight per m <sup>2</sup> of sheet, dry (approximately) (kg/m <sup>2</sup> )	Weight per m <sup>2</sup> of sheet at 20°C, 65% RH (approximately) (kg/m <sup>2</sup> )	Weight per pallet (approximately) (kg)
8	2500 x 1200	50	150	7.1	7.3	1140
10	2500 x 1200	40	120	8.8	9.0	1110
12	2500 x 1200	30	90	10.6	11.0	1020
15	2500 x 1200	25	75	12.8	13.1	1010
18	2500 x 1200	20	60	15.3	15.6	965
20	2500 x 1200	20	60	17.0	17.3	1070
25	2500 x 1200	15	45	21.3	21.7	1010

\*EMC: Equilibrium moisture content. \*\*Other sizes are available upon request. The properties in above tables are mean values given for information and guidance only. If certain properties are critical for a particular application, it is advisable to consult your nearest Promat Technical Department.

PROMATECT® 100 is manufactured under a quality management system certified in accordance with ISO9001: 2000 Certification and in accordance with the environmental standards of ISO14001. For further technical information, please consult Promat.

**GENERAL NOTE: WHEN MACHINING THIS PRODUCT AIRBORNE DUST MAY BE RELEASED, WHICH MAY BE HAZARDOUS FOR HEALTH. DO NOT BREATHE THE DUST. AVOID CONTACT WITH SKIN AND EYES. USE DUST EXTRACTION. RESPECT REGULATORY OCCUPATIONAL EXPOSURE LIMITS FOR TOTAL INHALABLE AND RESPIRABLE DUST. FOR MORE INFORMATION PLEASE CHECK THE MATERIAL SAFETY DATA SHEET APPLICABLE TO THIS PRODUCT, AVAILABLE UPON REQUEST.**