

1 General Description

PROMATECT®-L500 is a lightweight mineral matrix engineered board which is off-white/beige in colour and has a smooth sanded surface on one face with a lightly honeycombed texture on the reverse face.

PROMATECT®-L500 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. Untreated surfaces will absorb water which can cause some loss of strength but full strength is regained after drying. It will not encourage mould growth and is resistant to attack by insect or vermin.

PROMATECT®-L500 is chemically inert and is resistant to dilute acids and alkalis. Boards should be protected where high chemical concentrations are likely to occur.

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 of by a registered contractor.



Typical Mechanical Properties

Modulus of elasticity, E (BS EN 310: 1993)	Longitudinal	N/mm ²	1209
	Transverse	N/mm ²	1667
Flexural strength, F _{rupture} (BS EN 310: 1993)	Longitudinal	N/mm ²	1.46
	Transverse	N/mm ²	2.42
Tensile strength, T _{rupture} (BS5669: Part 1: 1989)	Longitudinal	N/mm ²	1.00
	Transverse	N/mm ²	1.26
Compressive strength (average, perpendicular on board face) (BS5669: Part 1: 1989)		N/mm ²	4.04

Applications

- Ventilation and smoke extraction ducts
- Electrical and mechanical services enclosures
- Horizontal membrane ceilings (Australia only)
- Vertical barriers (Australia only)

General Technical Data

Product generic description		Matrix engineered 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 0,0,0,0 to AS1530: Part 3.				
Building regulations classification		Class 0				
Nominal density at EMC* (average)		kg/m ³	500			
Alkalinity (approximately)		pH	9			
Thermal conductivity (approximately) at 40°C (ASTM C518: 1991)		W/m ² K	0.095			
Coefficient of expansion		m/mk	-2.5 x 10 ⁻⁶			
Nominal moisture content at EMC*		%	3.9			
Thickness tolerance of standard boards		mm	± 0.5			
Length x width tolerance of standard boards		mm	± 0-5			
Surface condition		Front face: smooth Back face: honeycomb pattern				
Thickness (mm)	Standard dimensions (mm x mm)	Number of boards per pallet	Surface per pallet (m ² /pallet)	Weight per m ² of sheet, dry (approximately) (kg/m ²)	Weight per m ² of sheet at 20°C, 65% RH (approximately) (kg/m ²)	Weight per pallet (approximately) (kg)
20	2500 x 1200	43	129	10.0	10.6	1367
25	2500 x 1200	35	105	12.5	13.2	1386
35	2500 x 1200	25	75	17.5	18.5	1387
40	2500 x 1200	21	63	20.0	21.2	1335
50	2500 x 1200	17	51	25.0	26.5	1351
52	2500 x 1200	17	51	26.0	27.5	1402

*EMC: Equilibrium moisture content. 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. Please note, pallet quantities based on standard horizontally stacked pallets. Loads delivered by containers will have vertical pallets which carry fewer of boards per pallet. Please consult Promat for details.

PROMATECT®-L500 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: AS MOST BUILDING PRODUCTS, THIS PRODUCT CONTAINS QUARTZ. MECHANICAL MACHINING (CUTTING, SANDING, DRILLING) OF BUILDING PRODUCTS WILL RELEASE DUST WHICH MAY CONTAIN QUARTZ PARTICLES. HOWEVER, FOR THIS PRODUCT, WITH EXPOSURE ASSESSMENTS PERFORMED BY ACCREDITED EUROPEAN LABORATORIES USING REFERENCE WORKPLACE MONITORING METHODS, ANY QUARTZ LEVELS IN THE RESPIRABLE DUST WERE BELOW THE DETECTION LIMIT. INHALATION OF HIGH CONCENTRATIONS OF DUST MAY IRRITATE THE AIRWAYS. DUST MAY ALSO CAUSE IRRITATION OF THE EYES AND/OR SKIN. INHALATION OF RESPIRABLE DUST CONTAINING QUARTZ, IN HIGH CONCENTRATIONS OR OVER PROLONGED PERIODS OF TIME CAN LEAD TO LUNG DISEASE (SILICOSIS) AND AN INCREASED RISK OF LUNG CANCER. AVOID THE INHALATION OF DUST BY USING MACHINERY WITH DUST EXTRACTION. GUARANTEE ADEQUATE VENTILATION ON THE WORK FLOOR. AVOID CONTACT WITH THE EYES AND SKIN AND AVOID INHALATION OF DUST BY WEARING APPROPRIATE PERSONAL PROTECTION GEAR (SAFETY GOGGLES, PROTECTIVE CLOTHING AND DUST MASK). FOR MORE INFORMATION PLEASE CHECK THE SAFETY DATA SHEET, AVAILABLE UPON REQUEST.