

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 strength is regained after drying. PROMATECT®-L500 does not encourage mould growth and is resistant to attack by vermin.

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

A health and safety data sheet is available from Promat and, as with any other material, 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 transportation and the disposal of the product to landfill. They can be placed in on-site rubbish skips with other general building waste which should then be disposed by a registered contractor in the appropriate and approved manner.

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} (BS 5669: Part 1: 1989)	Longitudinal N/mm ²	1.00
	Transverse N/mm ²	1.26
Compressive strength (average, perpendicular on board face) (BS 5669: Part 1: 1989)	N/mm ²	4.04



Applications

- Cladding to steel ducts, self-supporting ducts
- M&E services enclosure, cable protection systems
- Access panels and hatches

Annotation and/or video of the applications is available in digital format. For system details, please refer to <http://www.promat-ap.com>. For general information of cutting, fixing, fabrication, flush jointing and finishing of these systems, please refer to pages 37 to 43 of the 2012 edition handbook.

General Technical Properties

Product generic description	Matrix engineered mineral board	
Material class (DIN 4102: Part 1: 1998, BS 476: Part 4: 1970 and AS 1530: Part 1: 1994)	Non combustible	
Surface spread of flame	(BS 476: Part 7: 1997) (AS 1530: Part 3: 1989)	Class 1 Class 0,0,0,0
Building regulations classification	Class 0	
Nominal density at EMC* (average)	kg/m ³	500
Alkalinity (approximate)	pH	9
Thermal conductivity (approximate) 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	± 5
Surface condition	Front face: smooth sanded Back face: lightly honeycombed texture	

Thickness (mm)	Standard dimensions (mm x mm)	Number of boards per pallet	Surface per pallet (m ² /pallet)	Weight per m ² of sheet (approximate kg/m ²)	Weight per pallet (approximate kg)
20	2500 x 1200	43	129	10	1367
25	2500 x 1200	35	105	12.5	1386
35	2500 x 1200	25	75	17.5	1387
40	2500 x 1200	21	63	20	1335
50	2500 x 1200	17	51	25	1351
52	2500 x 1200	17	51	26	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 Promat.

PROMATECT®-L500 is manufactured under a quality management system certified in accordance with ISO 9001: 2008. The product has passed the site audit in accordance with the environmental standards of ISO 14001: 2004 and occupational health and safety requirements of OHSAS 18001: 2007.

AS WITH 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 LIMITS. INHALATION OF HIGH CONCENTRATIONS OF DUST MAY IRRITATE THE RESPIRATORY SYSTEM. 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 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 APPROPRIATE MATERIAL SAFETY DATA SHEET, AVAILABLE UPON REQUEST.