#### **PROMATECT® 50** Promat **Cement Bound Matrix Board**

## **General Description**

PROMATECT® 50 is Promat's matrix technology of binding organic materials and inorganic minerals within a calculated mineral matrix to form a monolithic core. Known as a Cement Bound Matrix board, this low energy environmentally friendly manufacturing process makes excellent boards that offer not only superior fire resistance but also exemplary physical strength, robustness and performance.

PROMATECT® 50 is off-white in colour and has one smooth surface. Because of the nature of CBM board Level 4 finish may not be achievable consistently without additional care. This must be taken in to account when costing out work. The Painting specification must always be followed closely and must be asked for and studied before any painting occurs. If a Level 5 finish is required or boards will be affected by glancing light, then specifiers must be aware that a high level of expertise will be required when skim coating the whole surface of board (similar to that required by all other board products for this level of finish).

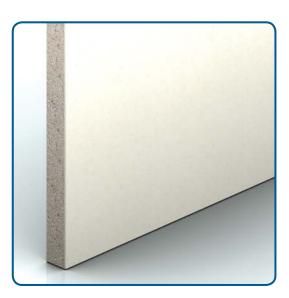
PROMATECT® 50 is resistant to the effects of moisture and will not physically deteriorate when used in damp or humid conditions. Performance characteristics are not degraded by moisture.

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**

Flexural strength, F <sub>rupture</sub> (EN 12467: 2000)	Longitudinal N/mm <sup>2</sup> Transverse N/mm <sup>2</sup>	13.76 10.80
Tensile strength, T <sub>rupture</sub> (EN 12467: 2000)	N/mm²	4.2
Compressive strength (average, perpendicular on boa (BS 5669: Part 1: 1989)	rd face) N/mm <sup>2</sup>	13.10

# **General Technical Properties**



### Applications

- Steel and timber stud partitions, solid/frameless partitions
- Self-supporting ceilings, suspended ceilings
- Membrane ceilings, timber floor protection •
- Cladding to steel ducts
- M&E services enclosure, riser pipes enclosure

Annotation and/or video of the applications is available in digital format. For system details, please refer to http://www.promatap.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.

Product generic description	PromaX® technology Cement Bound Matrix board	
Material class (BS 476: Part 4: 1970 and EN ISO 1182: 2002)	Non combustible	
Surface spread of flame (BS 476: Part 7: 1997)	Class 1	
Surface spread of flame for bare floors (AS ISO 9239: Part 1: 2003)	No ignition	
Building regulations classification	Class 0	
Heat and smoke release rates (AS/NZS 3837)	Group 1	
Fire propagation of product (BS 476: Part 6: 1989)	$I = 0; i_1 = 0; i_2 = 0; i_3 = 0$	
Simultaneous determination of ignitability, flame propagation, heat and smoke release (AS 1530: Part 3: 1999)	Indices 0/0/0/0-1	
Density kg/m³	Nominal 1100	
Thermal conductivity (approximate) at 20°C (ASTM C518: 1991) W/m°K	0.193	
Typical moisture content, ambient to dry condition (BS 5669: Part 1: 1989, Clause 9)	2.4%	
Emission test (ASTM D5116-90 for Green Label Singapore)	Within limits set out by the Singapore Environment Council	
Thickness tolerance of standard boards mm	± 0.5	
Length x Width tolerance of standard boards mm	±5	
Surface condition	Front face: smooth, fair Back face: smooth with fibre mesh reinforcement	

Standard dimensions\* Number of boards Weight per m<sup>2</sup> of sheet Thickness Surface per pallet Weight per pallet (m²/pallet) (mm)(mm x mm) per pallet (approximate kg/m<sup>2</sup>) (approximate kg) 7 2440 x 1220 78 232 7.7 1787 9 2440 x 1220 60 178 9.9 1763 12 2440 x 1220 45 134 13.2 1769 15 2440 x 1220 36 107 16.5 1766 2440 x 1220 30 89 19.8 1768 18 20 2440 x 1220 27 80 22 1762 22 2700 x 1200 25 81 25 1960 25 2440 x 1220 22 27.5 1733 63

\*Standard dimension for Australia is 2700mm x 1200mm. Other dimensions 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 Promat

OMATECT® 50 is manufactured under a quality management system certified in accordance with ISO 9001: 2008.

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

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