

General Description

PROMATECT® 40 is Promat's newest matrix technology of binding organic materials and inorganic minerals within a calculated mineral matrix to form a monolithic core. Known as PromaX® technology Cement Bound Matrix board, this low energy environmentally friendly manufacturing process makes an excellent boards that offers superior physical strength, robustness and performance.

PROMATECT® 40 is off-white in colour. One face is extremely smooth and ready to form a finished surface able to receive almost any form of architectural/finish treatment. The reverse face has a fibre mesh reinforcement (visible).

PROMATECT® 40 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 fully saturated PROMATECT® 40 retains up to 95% of its physical strength.

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 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, $F_{rupture}$ (BS EN 310: 1993)	Longitudinal (dry) N/mm ² Transverse N/mm ²	12.04 10.39
Tensile strength, $T_{rupture}$ (BS5669: Part 1: 1989)	Longitudinal N/mm ² Transverse N/mm ²	10.86
Compressive strength (average, perpendicular on board face) (BS5669: Part 1: 1989)	N/mm ²	10.70

Applications

- Roof sheathing
- Flooring and staircase decking
- Acoustic underlay
- Open plan office partitions
- Water-proof bathroom floor
- Backing board and lost formwork
- Base for kitchen, laboratory and industrial work surfaces
- Partitions
- Shelves
- Portable and pre-fabricated buildings
- Ceilings

General Technical Data

Product generic description	PromaX® technology Cement Bound Matrix board	
Material class	Non-combustible to BS 476: Part 4; 6 and 7 respectively	
Building regulations classification	Class O	
Heat and smoke release rates (tested to AS/NZS 3837)	Group 1	
Simultaneous determination of ignitability, flame propagation, heat and smoke release (tested to AS1530: Part 3)	Indices 0/0/0-1	
Spread of flame for bare floors (tested to AS ISO9239: Part 1)	No ignition	
Density (tested to BS5669: Part 1: 1989, Clause 8)	kg/m ³	Nominal 1000kg/m ³
Alkalinity (approximate)	pH	9 - 10
Thermal conductivity (approximate) at 20°C	W/m ² K	0.166
Typical moisture content (ambient to dry condition, tested to BS5669: Part 1, Clause 9)	1.5%	
Emission test (to ASTM D5116-90 for Green Label Singapore)	Within limits set out by the Singapore Environment Council	
Thickness tolerance of standard boards	mm	± 0.5 for board thickness ≤ 15mm ± 1.0 for board thickness > 15mm
Length x width tolerance of standard boards	mm	± 5
Water Tightness to BS 4624: 1981	Passed	
Surface condition	Front face: smooth fair face Back face: smooth with fibre mesh reinforcement	
Thickness (mm)	Standard dimensions* (mm x mm)	Weight per m ² of sheet (approximate at 1.5% MC) (kg/m ²)
4	2440 x 1220	4.32
6	2440 x 1220	6.48
8	2440 x 1220	8.64
10	2440 x 1220	10.80
12	2440 x 1220	12.96
15	2440 x 1220	16.20
20	2440 x 1220	21.60
25	2440 x 1220	27.00

*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® 40 PromaX® technology Cement Bound Matrix board is manufactured under a quality management system certified in accordance with ISO9001: 2000 Certification. For further technical information, please consult Promat.

GENERAL NOTE: AS FOR ALL NATURAL MATERIALS SUCH AS CONCRETE AND CLAY QUARTZ CAN BE PRESENT, THIS PRODUCT MAY ALSO RELEASE DUST CONTAINING QUARTZ PARTICLES WHEN IT IS MECHANICALLY MACHINED (CUTTING, SANDING, DRILLING). INHALATION OF HIGH CONCENTRATIONS OF DUST CAN IRRITATE THE RESPIRATORY SYSTEM. DUST CAN ALSO IRRITATE THE EYES AND/OR THE SKIN. THE INHALATION OF QUARTZ CONTAINING DUST, IN PARTICULAR HIGH CONCENTRATION OF FINE (RESPIRABLE) DUST OR OVER A PROLONGED PERIOD 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 THE DUST BY WEARING APPROPRIATE PERSONAL PROTECTION GEAR (SAFETY GOGGLES, PROTECTIVE CLOTHING AND DUST MASK). FOR MORE INFORMATION PLEASE CHECK THE MATERIAL SAFETY DATA SHEET, AVAILABLE UPON REQUEST.