

### General Description

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

PROMATECT®-L 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®-L 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 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<br>(BS EN 310: 1993)   | Longitudinal | N/mm <sup>2</sup> | 898  |
|   | Transverse   | N/mm <sup>2</sup> | 802  |
| Flexural strength, F <sub>rupture</sub><br>(BS EN 310: 1993)                          | Longitudinal | N/mm <sup>2</sup> | 1.93 |
|   | Transverse   | N/mm <sup>2</sup> | 1.63 |
| Tensile strength, T <sub>rupture</sub><br>(BS5669: Part 1: 1989)                      | Longitudinal | N/mm <sup>2</sup> | 0.69 |
|   | Transverse   | N/mm <sup>2</sup> | 0.94 |
| Compressive strength (average, perpendicular on board face)<br>(BS5669: Part 1: 1989) |              | N/mm <sup>2</sup> | 3.90 |

### Applications

- Structural steel
- Ventilation and smoke extraction ducts
- Electrical and mechanical services enclosures

### 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 <sup>3</sup>                           | 450  |   |                                      |  |
| Alkalinity (approximate)                                     |                               |                             | pH  | 9  |   |                                      |  |
| Thermal conductivity (approximate) at 40°C (ASTM C518: 1991) |                               |                             | W/m <sup>2</sup> K                          | 0.083  |   |                                      |  |
| Coefficient of expansion                                     |                               |                             | m/mk  | -2.5 x 10 <sup>-6</sup>  |   |                                      |  |
| Nominal moisture content at EMC*                             |                               |                             | %   | 3.3  |   |                                      |  |
| Thickness tolerance of standard boards                       |                               |                             | mm  | ± 0.5  |   |                                      |  |
| Length x width tolerance of standard boards                  |                               |                             | mm  | ± 0-5  |   |                                      |  |
| Surface condition  |                               |                             |   | Front face: smooth<br>Back face: honeycomb 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 (approximate) (kg/m <sup>2</sup> ) | Weight per m <sup>2</sup> of sheet at 20°C, 65% RH (approximate) (kg/m <sup>2</sup> ) | Weight per pallet (approximate) (kg) |  |
| 20   | 2500 x 1200                   | 40                          | 120   | 9.21   | 9.24  | 1108                                 |  |
| 25   | 2500 x 1200                   | 35                          | 105   | 11.17  | 11.55   | 1212                                 |  |
| 30   | 2500 x 1200                   | 30                          | 90  | 13.4   | 13.86   | 1247                                 |  |
| 40   | 2500 x 1200                   | 20                          | 60  | 17.87  | 18.48   | 1108                                 |  |
| 50   | 2500 x 1200                   | 16                          | 48  | 22.34  | 23.1  | 1108                                 |  |

\*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 boards per pallet. Please consult Promat for details. PROMATECT®-L 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 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 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 MATERIAL SAFETY DATA SHEET, AVAILABLE UPON REQUEST.**