

### General Description

PROMATECT®-H is a non-combustible matrix engineered mineral board reinforced with selected fibres and fillers. It is formulated without inorganic fibres and does not contain formaldehyde.

PROMATECT®-H is off-white in colour and has a smooth finish on one face with a sanded reverse face. PROMATECT®-H can be left undecorated or easily finished with paints, wallpapers or tiles.

PROMATECT®-H 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.

PROMATECT®-H is also produced as bevelled edge panels for suspended ceilings using a concealed grid system.

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> | 4995  |
|   | Transverse   | N/mm <sup>2</sup> | 4389  |
| Flexural strength, F <sub>rupture</sub><br>(BS EN 310: 1993)                          | Longitudinal | N/mm <sup>2</sup> | 10    |
|   | Transverse   | N/mm <sup>2</sup> | 6     |
| Tensile strength, T <sub>rupture</sub><br>(BS5669: Part 1: 1989)                      | Longitudinal | N/mm <sup>2</sup> | 7.16  |
|   | Transverse   | N/mm <sup>2</sup> | 4.94  |
| Compressive strength (average, perpendicular on board face)<br>(BS5669: Part 1: 1989) |              | N/mm <sup>2</sup> | 11.36 |

### Applications

- Structural steel
- Ceilings, floors and roofs
- Partitions and external walls
- Ventilation and smoke extraction ducts
- Electrical and mechanical services enclosures
- Fire resistant glazing
- Tunnel fire protection and upgrading of concrete structures
- Smoke barriers, access panels and hatches

### 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> 975   |
| Alkalinity (approximate)                                     | pH 12   |
| Thermal conductivity (approximate) at 40°C (ASTM C518: 1991) | W/m <sup>2</sup> K 0.242  |
| Coefficient of expansion                                     | m/mk -6.4 x 10 <sup>-6</sup>  |
| Nominal moisture content at EMC*                             | % 6   |
| Thickness tolerance of standard boards                       | mm ± 0.5  |
| Length x width tolerance of standard boards                  | mm ± 5  |
| Surface condition  | Front face: smooth<br>Back face: dimple 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) |
|----------------|-------------------------------|-----------------------------|---|--|---|--------------------------------------|
| 9              | 2440 x 1220                   | 61                          | 181.5                                       | 8.77   | 9.29  | 1687                                 |
| 12             | 2440 x 1220                   | 46                          | 136.9                                       | 11.7   | 12.4  | 1697                                 |
| 15             | 2440 x 1220                   | 36                          | 107.1                                       | 14.6   | 15.5  | 1660                                 |
| 20             | 2440 x 1220                   | 27                          | 80.3  | 19.5   | 20.6  | 1654                                 |
| 25             | 2440 x 1220                   | 22                          | 65.4  | 24.3   | 25.7  | 1680                                 |

\*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.

PROMATECT®-H 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 FOR ALL PRODUCTS CONTAINING QUARTZ, SUCH AS CONCRETE AND CLAY, THIS PRODUCT WILL 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.**

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