

### 1.1 Product properties

PROMATECT®-H is a non combustible matrix engineered mineral board reinforced with selected fibres and fillers. It does not contain formaldehyde.

PROMATECT®-H is off-white in colour. The front face is smooth and is suitable for any forms of architectural/finishing treatment; the reverse face is sanded. The board can be left undecorated or easily finished with paints, wallpapers or tiles.

PROMATECT®-H is resistant to effects of moisture and will not physically deteriorate in a damp or humid environment. Whilst its performance characteristics are not degraded by moisture or aging, PROMATECT®-H is not designed for application in areas subject to continual damp or high temperatures.

#### Material properties

<b>Generic description</b>	PROMATECT®-H matrix engineered mineral board
<b>Surface condition</b>	Front face: smooth Back face: sanded
<b>Building regulations</b>	Class 0
<b>Alkalinity</b>	pH 12
<b>Coefficient of expansion</b>	-6.4 x 10 <sup>-6</sup> m/mk
<b>Thickness tolerance</b>	±0.5mm (standard thickness boards)
<b>Dimension tolerance</b>	±5mm (standard dimension boards)

#### Physical performance

Property	Test method	Test results
<b>Density</b>	BS EN 323	Nominal 975kg/m <sup>3</sup>
<b>Modulus of elasticity, E</b>	BS EN 310	Longitudinal 4995N/mm <sup>2</sup> Transverse 4389N/mm <sup>2</sup>
<b>Flexural strength, F<sub>rupture</sub></b>	BS EN 310	Longitudinal 10N/mm <sup>2</sup> Transverse 6N/mm <sup>2</sup>
<b>Tensile strength, T<sub>rupture</sub></b>	BS 5669: Part 1	Longitudinal 7.14N/mm <sup>2</sup> Transverse 4.94N/mm <sup>2</sup>
<b>Compressive strength</b>	BS 5669: Part 1	11.36N/mm <sup>2</sup>
<b>Combustibility</b>	BS 476: Part 4 AS 1530: Part 1 DIN 4102: Part 1	Non combustible
<b>Surface burning</b>	BS 476: Part 7 AS 1530: Part 3	Class 1 Class 0,0,0,0
<b>Thermal conductivity</b>	ASTM C518	0.242W/m <sup>2</sup> K
<b>Moisture content</b>	BS EN 322	6%

PROMATECT®-H can be produced with bevelled edges for application in partitions and suspended ceilings using a concealed grid system.

#### Application

- Structural steel fire protection
- Steel stud and solid/frameless partitions
- Conversion of external to internal walls
- External walls
- Self-supporting membrane ceilings
- Suspended ceilings
- Cladding to steel ducts, self-supporting ducts
- M&E services enclosure
- Smoke barrier, parapet/spandrel wall
- Access panels and hatches
- Concrete/brick wall upgrading

#### Health and safety

When machining the PROMATECT®-H 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. A health and safety data sheet is available from Promat and, as with any other material, should be read before working with the product.

PROMATECT®-H product is not classified as a dangerous substance so no special provisions are required regarding the transportation and the disposal of the product to landfill. The product 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.

All properties herein 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®-H 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.

Standard thickness	Standard dimension	Number of boards per pallet	Surface per pallet	Weight of boards per m <sup>2</sup>	Weight per pallet
9mm	2440mm x 1220mm	61	181.5m <sup>2</sup>	Approx. 8.77kg	Approx. 1688kg
12mm	2440mm x 1220mm	46	136.9m <sup>2</sup>	Approx. 11.7kg	Approx. 1698kg
15mm	2440mm x 1220mm	36	107.2m <sup>2</sup>	Approx. 14.6kg	Approx. 1662kg
20mm	2440mm x 1220mm	27	80.4m <sup>2</sup>	Approx. 19.5kg	Approx. 1664kg
25mm	2440mm x 1220mm	22	65.4m <sup>2</sup>	Approx. 24.3kg	Approx. 1681kg