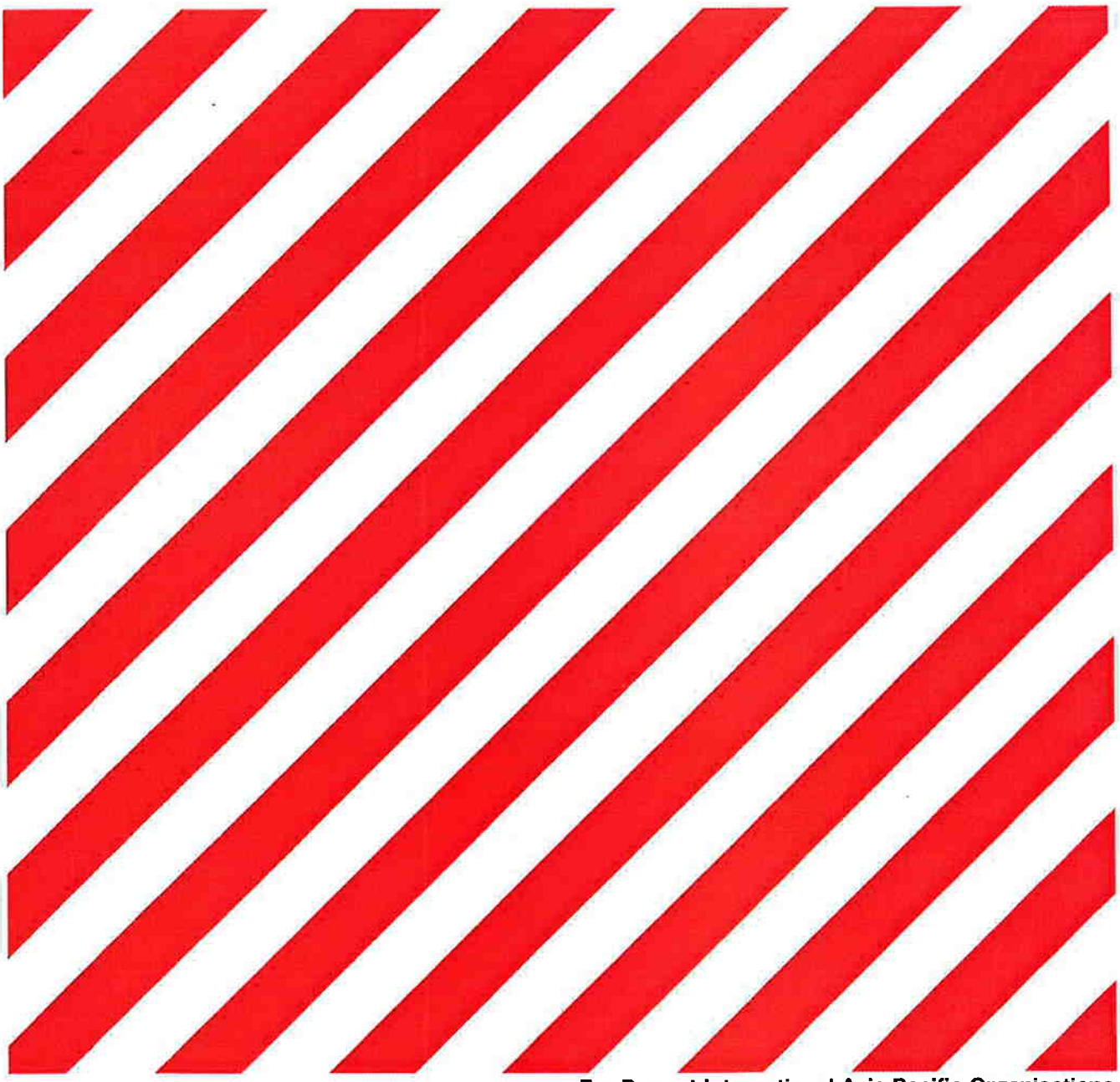
Promat

PROACTIVE FIRE PROTECTION SYSTEMS
Application & Technical Manual



For Promat International Asia Pacific Organisations

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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 carriage and the disposal of the product to landfill. They can be placed in an on-site skip with other general building waste which should then be disposed by a registered contractor.

Typical Mechanical Properties

Modulus of elasticity, E (BS EN 310: 1993)	Longitudinal Transverse	N/mm² N/mm²	4995 4389
Flexural strength, $F_{rupture}$ (BS EN 310: 1993)	Longitudinal Transverse	N/mm² N/mm²	10 6
Tensile strength, $T_{rupture}$ (BS5669: Part 1: 1989)	Longitudinal Transverse	N/mm² N/mm²	7.16 4.94
Compressive strength (average, perpendicular on board face) (BS5669: Part 1: 1989)		N/mm²	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/m³	975
Alkalinity (approximately)	pH	12
Thermal conductivity (approximately) at 40°C (ASTM C518: 1991)	W/m°K	0.17
Coefficient of expansion	m/mk	-6.4 x 10^{-6}
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 Back face: dimple pattern

Thickness (mm)	Standard dimensions (mm x mm)	Number of boards per pallet	Surface per pallet (m²/pallet)	Weight per m² of sheet, dry (approximately) (kg/m²)	Weight per m² of sheet at 20°C, 65% RH (approximately) (kg/m²)	Weight per pallet (approximately) (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 AIRWAYS. 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 SAFETY DATA SHEET, AVAILABLE UPON REQUEST.