

General Description

PROMATECT®-S is a composite board manufactured with a fibre reinforced cement core, with outer facings of 0.5mm perforated galvanised steel mechanically bonded to each surface of the core. Other steel finishes such as stainless steel are also available for use where greater resistance to corrosion is required.

PROMATECT®-S systems combine lightness, strength, impact resistance and durability with exceptional fire resistance. These systems remain resistant to fire fighters' hoses, leaving them capable of performing their original function even in the aftermath of a fire.

PROMATECT®-S systems have been used successfully for many years, including rail and metro projects, military developments and in commercial, pharmaceutical and petrochemical facilities.

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

PROMATECT®-S board thickness		6mm type	9.5mm type
Modulus of elasticity, E	UDL G/Pa	414	199
Flexural strength, F _{rupture}	UDL M/Pa (N/mm ²)	333	351
Impact strength (BS5669: Part 1: 1989)	N/m	Exceeds 980	Exceeds 580

Applications

- Structural steel
- Ceilings, floors and roofs
- Partitions and external walls
- Ventilation and smoke extraction ducts including blast resistant duct systems
- Electrical and mechanical services enclosures
- Smoke barriers, doors, access panels and hatches

General Technical Data

PROMATECT®-S board thickness		6mm type	9.5mm type			
Material class		Non-combustible to BS476: Part 4, ISO1182 (amended) and AS1530: Part 1.	Non-combustible to BS476: Part 4, ISO1182 (amended) and AS1530: Part 1.			
Surface spread of flame		Class 1 to BS476: Part 7.	Class 1 to BS476: Part 7.			
Building regulations classification		Class 0	Class 0			
Nominal density at EMC* (average)	kg/m ³	2470	2280			
Thermal conductivity (approximately) at 40°C (ASTM C518: 1991)	W/m ² K	0.179	0.179			
Nominal moisture content at EMC*	%	7	8			
Water absorption capacity (average)	g/cm ³	5.73	4.77			
Thickness tolerance of standard boards	mm	- 1 + 2	- 1 + 1.5			
Length x width tolerance of standard boards	mm	± 5	± 5			
Surface condition		Galvanised steel with fibre cement core	Galvanised steel with fibre cement core			
Thickness (mm)	Standard dimensions (mm x mm)	Number of boards per pallet	Surface per pallet (m ² /pallet)	Weight per m ² of sheet, dry (approximately) (kg/m ²)	Weight per m ² of sheet at 20°C, 65% RH (approximately) (kg/m ²)	Weight per pallet (approximately) (kg)
6	2500 x 1200	30	90	14	15	1350
9.5	2500 x 1200	25	75	20	21	1575

*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 of boards per pallet. Please consult Promat for details.

PROMATECT®-S 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 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 AIRWAYS. 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 SAFETY DATA SHEET, AVAILABLE UPON REQUEST.