

PROMATECT-S

Product Information

PROMATECT-S is a sandwich panel consisting of a non-combustible matrix engineered mineral core with thin galvanised steel plates bonded to front and back face of the board. The sheets are used in applications where improved impact and strength of the sheets needs to be maintained during fire conditions such as external blast proof walls, load bearing access panels and load bearing ceiling membranes.

1. Product composition

PROMATECT-S sheets consist of the following:

- Portland cement
 - Mineral fillers
 - Organic reinforcing fibres
 - Functional additives
 - Perforated 0.5 mm thick galvanised steel plate on front and back
- It does not contain inorganic fibres or formaldehyde.

2. Production method

PROMATECT-S sheets are manufactured on a Hatschek machine and are autoclaved at high temperature and pressure. The steel plates are bonded to the cement sheet. PROMATECT-S is produced in Europe by the Etex Group, the most global manufacturer of fibre cement with production facilities in 40 different countries.

PROMATECT-S is manufactured under a quality management system certified in accordance with ISO9001: 2000 Certification and in accordance with the environmental standards of ISO 14001.

3. Dimensions and tolerances

Standard thickness: 9.5 mm

Length: 2500 mm

Width: 1200 mm

Tolerances

	After cutting
Thickness	- 1.0 / + 1.5 mm
Length and width	+/- 5.0 mm
Squareness	1.0 mm / m

4. Weight

Thickness	Weight
9.5 mm	Approx 21 kg/m ²

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5. Colours

PROMATECT-S has a perforated galvanised steel sheet bonded on both faces. The core is beige.

6. Technical properties (average values)

Density (nominal)	:	2,280 kg/m ³
Bending strength ₃ (24h immersed in water) //	:	351 N/mm ²
Modulus of elasticity	:	> 199,000 N/mm ²
Thermal conductivity coefficient	:	0.179 W/mK
Reaction to fire according to BS476: Part4	:	Incombustible
Surface spread of flame to BS476: Part 7	:	Class 1

7. Advantages

- Strong, impact resistant board
- No flame spread, no fume development, no toxic gasses
- Resistant to high temperatures
- Resistant to the effects of humidity: PROMATECT-S will not physically deteriorate when used in damp or humid conditions
- Resistant to fungus, bacteria, insects, vermin, etc.
- Resistant to many chemicals
- Environmentally friendly, no harmful gas emissions
- High dimensional stability
- Impact resistance
- One surface is semi-smooth and can be easily finished with paints, wallpapers or tiles

8. Working guidelines

Cutting:

- Jigsaw with tungsten carbide-tipped tooth cutting blade for small holes
- PBS Distributors operates a CNC waterjet cutting machine in the Albany facility that allows for any design to be cut, with the smallest variations. Contact us for more information.

At all times, cutting should be carried out in well ventilated spaces, using dust extraction. Operators should take precautions and wear protective and respiratory gear at all times.

Edge finish:

- File rough edges

Drilling:

- For holes: carbide-tipped twist drill (or completely in carbide) with a 60° or 80° nose angle
- For round apertures: cup drill or circular cutter, carbide-tipped

The sheet should be supported around the hole to be drilled (e.g. by a wooden surface).
Cutting and drilling must take place in a dry environment.

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Fixing accessories:

The method and choice of fixing accessories (e.g. stainless steel, galvanized steel, cadmium plated steel) is dependent on the application and the environment.

1) Screwing:

- Use Tek screws in accordance with the Promat data sheet for the specified application and performance
- The PROMATECT-S sheets need to be pre-drilled not less than 12 mm from the edge and at 50 mm and 100 mm from the edges at sheet corners (see detail).
- Do not overdrive the screws. The optimum is to have the screw head at 0.5 mm below the surface of the sheet.
- Variable-speed screw guns can be used with a maximum speed of 2,500 rpm and fitted with a depth gauge.

Caulking:

- Only use neutral mastics. Non-neutral silicones or thiokols can result in staining.

Health and safety aspects:

While the sheets are being processed, dust can be released which can irritate airways and eyes. It is recommended that a minimum P2 dust mask and safety goggles be worn. Appropriate dust extraction or proper ventilation should be used depending on the room in which the work is being carried out or the equipment being used. Long-term exposure to dust can be harmful to health.

9. Maintenance and cleaning

For minor soiling, washing with a mild household detergent or soft soap solution followed by rinsing with clear water. PROMATECT-S's surface is porous and cleaning requires rather chemical than mechanical ways to clean. No abrasive products or tools shall be used to clean the surface. Please consult the PBS cleaning instructions for more specific cleaning advice.

10. Handling

The sheets are packed on pallets. They must be kept dry during transport. The sheets must be horizontally stacked on a flat surface. The sheets must always be sufficiently supported so that they do not sag. The sheets must be stored in a dry ventilated space. If the sheets are stored outside, they must always be protected against rain by a tarpaulin or plastic sheet. If the sheets do become wet in the packing, all packaging must be removed and the sheets must be wiped dry and placed in a way that they can dry completely. A sheet must always be lifted from a stack by two people and then be carried on edge.

11. Guarantee

The guarantee and the guarantee conditions are available on request from PBS Distributors,