

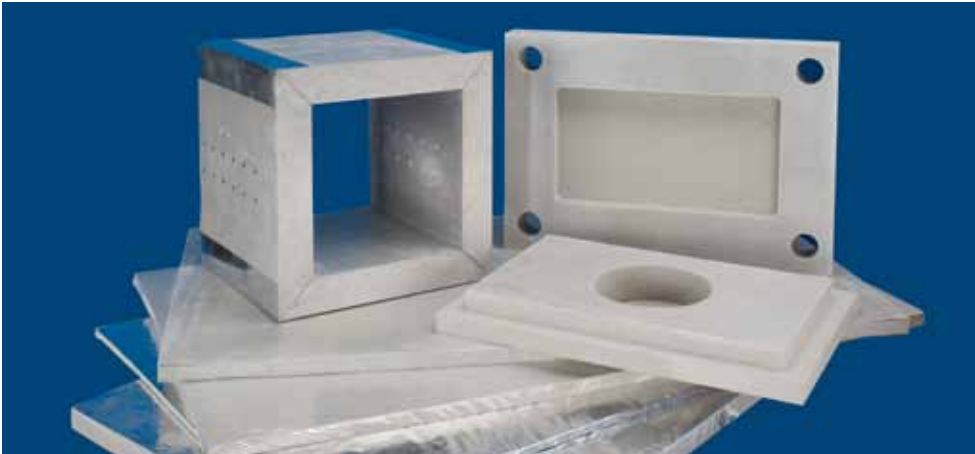
PROMALIGHT®

microporous insulation board



PROMALIGHT®

PROMALIGHT® is a microporous insulation board made of pyrogenic silica. PROMALIGHT® has excellent insulation properties thanks to its fine structure.



- Microporous insulation materials have exceptionally low thermal conductivity rates, even lower than the one of stagnant air. This requires pores of $< 0,1 \mu\text{m}$, which means that the cavities are smaller than or equivalent to the average range of gas molecules. As a result the transfer of heat by convection and the conductivity in a solid state are reduced. The infrared-permeability is reduced even more by adding turbidity agents.
- The main components of PROMALIGHT® are highly dispersive silicic acid, titanium dioxide and adjuvants. The powdery mixture is compressed into boards and shaped parts, which are converted into PROMALIGHT® products eventually

PROMALIGHT® microporous high temperature insulation materials have very low thermal conductivity rates, thanks to their microporous structure. The thermal insulation capacity of PROMALIGHT® exceeds the one of other thermal insulation materials such as mineral wool, ceramic fibre products and lightweight refractory insulation bricks for applications up to max. 1000°C . With PROMALIGHT® the same insulation capacity can be reached with a thinner insulation layer, which can be up to six times thinner

MARKETS AND APPLICATIONS

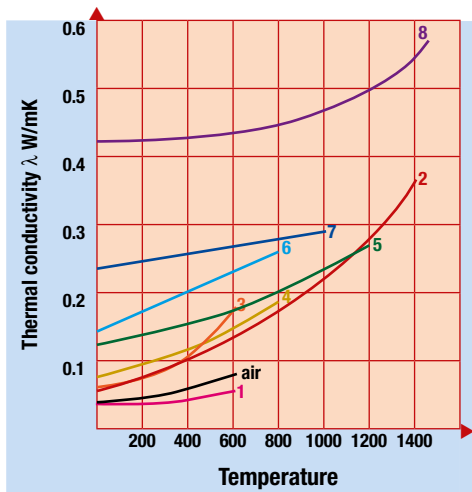
PROMALIGHT® consists of raw materials which are harmless with regard to working hygiene and not subjected to any classification.

- Steel industry
- Non-ferro industry
- Glass industry
- Aviation and space technology
- Petrochemistry
- Transport
- Construction of industrial furnaces
- Domestic appliances
- Fuel cells
- Offshore
- Nightrate heating appliances
- Power plants
- Stoves and fires
- Laboratory and hobby kilns
- Shipbuilding industry

PRODUCT RANGE

- PROMALIGHT® 320
- PROMALIGHT® 320HD
- PROMALIGHT® 320FPA
- PROMALIGHT® 320ALU
- PROMALIGHT® 330
- PROMALIGHT® vormstukken
- PROMALIGHT® 240
- PROMALIGHT® 240FX

PROMALIGHT® insulation materials are used as back-up insulation:



Density graph of different materials kg/m^3

● 1	Microporous insulation board	300
● 2	Ceramic fibre board	250
● 3	Rockwool board	150
● 4	Calcium silicate board	250
● 5	Refractory bricks	500
● 6	Vermiculite board	400
● 7	Refractory bricks	800
● 8	Refractory bricks	1040

PROMALIGHT®

microporous insulation board

PROMALIGHT® 320

Solid microporous board, which serves as a basis for all the other PROMALIGHT® products.

Dimensions: 1000 x 610 mm

Thickness: 5 – 50 mm

Can be cut to size and pierced very accurately and precisely by means of conventional woodworking machinery and tools.



▲ Galvanizing tank

PROMALIGHT® 320 FPA

PROMALIGHT® 320 FPA is a flexible PROMALIGHT® 320 board, which has been vacuum-sealed in a plastisized aluminium foil. It can also be made from hydrophobic standard boards.

Dimensions: minimum 305 mm
maximum 1000 mm

Thickness: 3 – 10 mm

APPLICATIONS: Metallurgy.

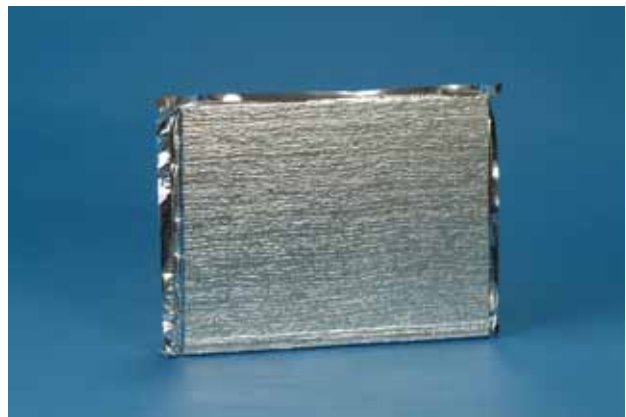
- Ladle,
- Torpedo,
- Tundish



▲ Teeming ladle

ADVANTAGES AND PROPERTIES

- Extremely low thermal conductivity, especially at high temperatures
- High thermal stability
- Totally inorganic, no outgasing
- Outstanding chemical resistance (most acids, alkalis and exhaust gases)
- Fire resistant
- Excellent workability



▲ PROMALIGHT® 320 FPA



▲ Torpedo

PROMALIGHT® microporous insulation board

PROMALIGHT® 320 ALU

PROMALIGHT® 320 Alu is a flexible standard PROMALIGHT® 320 board sealed in an aluminium foil, which makes it water- and liquid resistant. It can also be made from hydrophobic standard boards.

Dimensions: 1000 x 610 mm

Thickness: 5 – 50 mm

Can be cut to size and pierced very accurately and precisely by means of conventional woodworking machinery and tools.

- APPLICATIONS:**
- Metallurgy
 - Aluminium industry



▲ Tundish

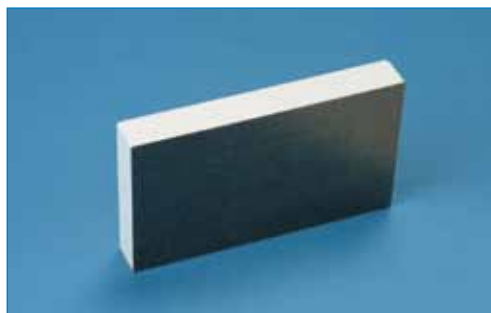


▲ Bottom teeming ladle

PROMALIGHT® 330

PROMALIGHT® 330 is a PROMALIGHT® 320 board, which has been covered with a mica sheet on one or both sides. The mica sheet enhances the reflection of infrared rays and the strength of the board.

- APPLICATIONS:**
- Instrumentation
 - Metallurgy



▲ PROMALIGHT® 330

PROMALIGHT® 320 HY

PROMALIGHT® 320HY is a standard PROMALIGHT® 320 board, which isn't water- or liquid resistant.

For these applications we provide the hydrophobe PROMALIGHT® 320 version, which is water-resistant up to 250°C.

Dimensions: 1000 x 610 mm

Thickness: 10 – 50 mm

- APPLICATIONS:** Metallurgy.



▲ PROMALIGHT® 320 Hydrophobic

PROMALIGHT®

microporous insulation board

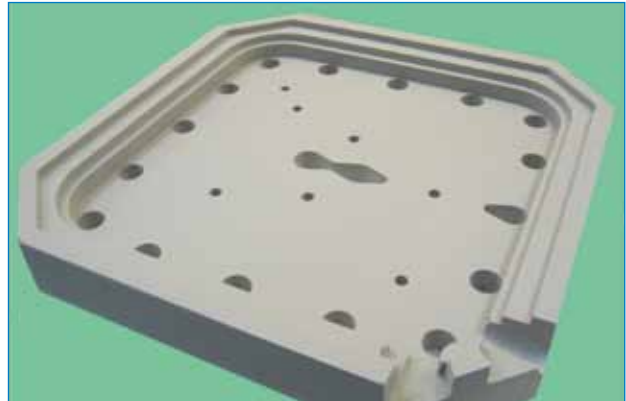
PROMALIGHT® 320 HD

PROMALIGHT® 320HD is a high-density board with a better workability and better mechanical properties.

Can be cut to size and pierced very accurately and precisely by means of conventional woodworking machinery and tools.

APPLICATIONS:

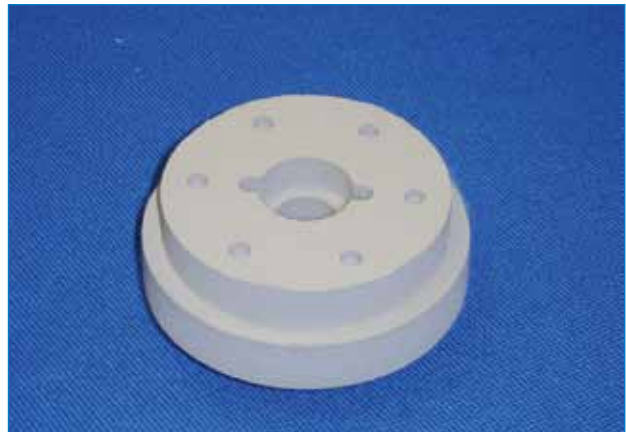
- Fuel cells
- Data loggers
- Hot plates



▲ 320HD Fuell cell (parts)



▲ 320HD Cooking plates



▲ 320HD Fuell cell (parts)

SHAPES / INSULATION OF DUCTS

For larger orders special moulds can be made on request.

Shells and segments can be cut from standard PROMALIGHT® 320 boards.

The shells can be covered with fiberglass, textile or aluminium foil and the shapes can be coated.



▲ Fuell cells (parts)



▲ Shells

PROMALIGHT®

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PROMALIGHT® 240

PROMALIGHT® 240 is a microporous board, which has been pressed into glass fibre textile.

Dimensions: min. 400 mm
max. 1200 mm
Thickness: 5 mm – 25 mm

PROMALIGHT® 240 FX

PROMALIGHT® 240FX is a PROMALIGHT® 240 board, which has been stitched through. It can easily be applied around ducts and on curved surfaces.

Dimensions: min. 400 mm
max. 1200 mm
Thickness: 5 mm – 12 mm

APPLICATIONS: Insulation of appliances and ducts.



▲ Heat storage stove



▲ PROMALIGHT® 240



▲ PROMALIGHT® 240FX

PROMALIGHT®

microporous insulation board

PROMAGUARD®

Lichtweight fire protection board for load-bearing constructions and applications, where space and weight-bearing capacity are limited.

SHIPBUILDING INDUSTRY:

- Steel
- Aluminium
- With glassfibre reinforced plastic
- Wood

CERTIFICATES: RINA, MCA
A60, A30, B15



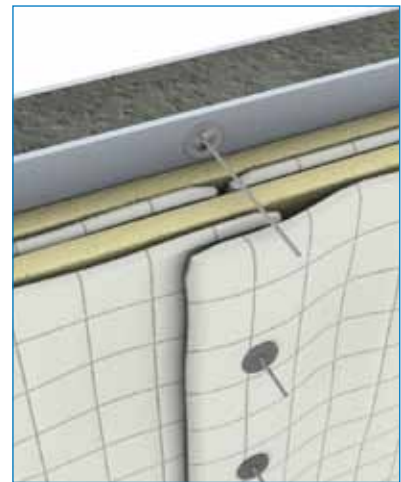
▲ PROMAGUARD®



▲ Aluminium- or steel structure



▲ Aluminium- or steel structure



▲ GRP-structure



▲ Super yacht



▲ Super yacht

Promat

High Temperature Insulation

Promat n.v.

Kuiermansstraat 1, 1880 Kapelle-op-den-Bos, Belgium

Tel. **+32 15 71 21 86** Fax **+32 15 71 26 90**

E-mail **info-hti@promat.be** Web **www.promat-hti.be**