

PROMALIGHT® 320 - 320HD 320 FPA - 320 ALU - 330

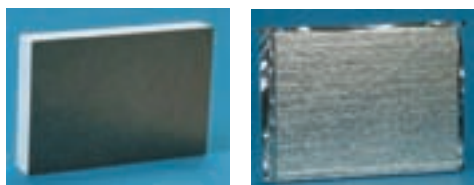
PROMALIGHT® is a microporous insulation board of mainly pyrogenic silica. PROMALIGHT® has extreme thermal insulation properties thanks to their fine microporous structure.

PROMALIGHT® 320 is a microporous thermal insulation board with very good thermal and mechanical properties. It is the core material for the PROMALIGHT® 330 boards.

PROMALIGHT® 320 FPA are flexible microporous PROMALIGHT® 320 boards vacuum-sealed in plasticized aluminium foil.

PROMALIGHT® 320HD is a microporous insulation board with increased mechanical properties.

PROMALIGHT® 320HD can be worked with woodworking tools and machines and with better results than standard quality.



PROMALIGHT® 330 are composite boards made of a microporous PROMALIGHT® 320 board reinforced on both sides by mica-sheets. The mica-sheets improves the thermal conductivity values and the mechanical properties.

ADVANTAGES AND PROPERTIES

PROMALIGHT® 320 - 330

- extremely low thermal conductivity, especially at high temperatures
- high thermal stability
- totally inorganic, no outgasing,
- outstanding chemically resistant (most acids, alkalis and exhaust gases)
- flame-resistant
- excellent workability and handling

PROMALIGHT® 320 FPA

- Resists to humidity and liquids
- Flexible panel
- Easy to handle
- Increased strength

PROMALIGHT® 320 ALU is a flexible microporous PROMALIGHT® 320 sealed in an aluminium foil.

AREAS OF APPLICATION

- Microporous thermal insulation materials show extremely low thermal conductivity values due to their pore size in the nano range, smaller than the mean free path length of the air molecules.
- This enhances many times the thermal insulation performances in comparison to other thermal insulation materials such as mineral wool, ceramic fibre and lightweight refractory bricks. For this reason, microporous materials are preferred for applications, where a large reduction in temperature is required within a limited space.

WORKING AND PROCESSING

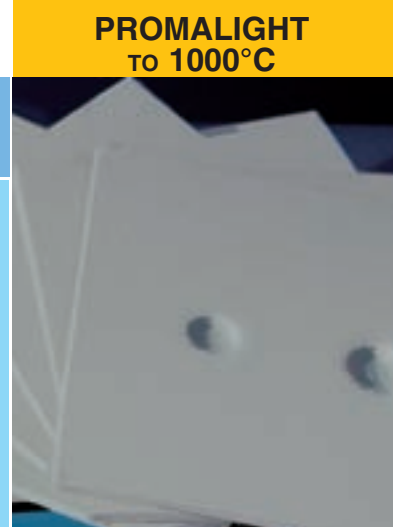
PROMALIGHT® can be sawn, drilled and milled with stationary wood processing machines. The boards can be fixed in place with ALSIFLEX® glue 1000 or by mechanical means such as anchors, pins and clips.

HEALTH AND SAFETY

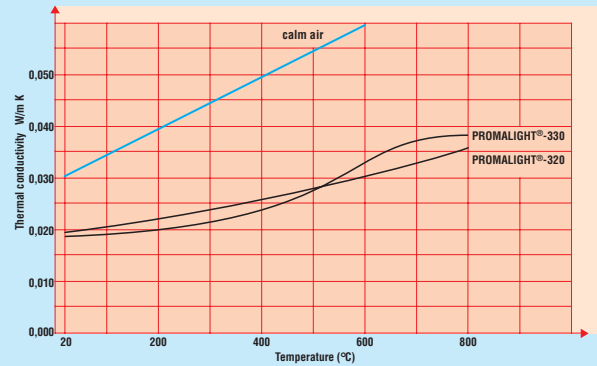
PROMALIGHT® consists of raw materials which are harmless with regard to working hygiene and not subjected to any classification. For detailed information see MSDS.

AREAS OF APPLICATION

- Industrial furnace constructions for ceramic kilns, metallurgy furnaces
- Petrochemical industry
- Laboratory and hobby kilns
- Thermal insulation in steel smelting and casting plants such as tundishes
- Non-ferrous industry especially aluminium electrolysis reduction cells
- Glass processing plants such as fore-hearths and feeder bowls
- Power plants
- Protection for electronic components such as measuring elements and safes
- Domestic appliances such as night storage heaters, boilers, cookers and stoves



PROMALIGHT TO 1000°C



TECHNICAL DATA

PRODUCT NAME	PROMALIGHT® 320	PROMALIGHT® 320 HD	PROMALIGHT® 330	
Colour	grey	grey	green/grey	
Classification temperature:	1000	1000	1000	°C
Shrinkage after 12h at 900°C	1,3		<2,0	%
Bulk density ρ	220 to 330	320 to 360	310	kg/m ³
Cold compressive strength				
- maximum	3,9	4,1	3,3	MPa
- at 10% deformation	0,9	1,1		
Bending strength δ	0,15	0,20	0,5	MPa
Specific heat capacity	1,05	1,05	1,05	kJ/kgK
Thermal conductivity				
200°C	0,022	0,022	0,020	W/mK
400°C	0,026	0,026	0,023	W/mK
600°C	0,030	0,030	0,033	W/mK
800°C	0,036	0,036	0,038	W/mK
Chemical analysis				
SiO ₂	77,5	77,5	77,5	%
SiC ₂	20	20	20	%
CaO	2,5	2,5	2,5	%

STANDARD SIZES

Promat contains the right to change without notice the properties and values of all products. The given technical values are obtained in specific conditions and are average and indicative. In case of any doubt if these properties and/or values are matching the application requirements, please contact Promat for advise.

Dimensions	boards/pallet
PROMALIGHT® 320	
1000 x 610 x 5 mm	400
1000 x 610 x 10 mm	200
1000 x 610 x 15 mm	132
1000 x 610 x 20 mm	100
1000 x 610 x 25 mm	80
1000 x 610 x 30 mm	66
1000 x 610 x 40 mm	50
1000 x 610 x 50 mm	40
PROMALIGHT® 320 HD	
1000 x 610 x 5 mm	400
1000 x 610 x 10 mm	200
1000 x 610 x 15 mm	132
1000 x 610 x 20 mm	100
1000 x 610 x 25 mm	80
1000 x 610 x 30 mm	66
1000 x 610 x 40 mm	50
1000 x 610 x 50 mm	40

Dimensions	boards/pallet
PROMALIGHT® 320 FPA	
500 x 305 x 3 mm	167
500 x 305 x 5 mm	100
500 x 305 x 6 mm	80
500 x 305 x 7 mm	68
500 x 305 x 8 mm	60
500 x 305 x 9 mm	52
500 x 305 x 10 mm	48
PROMALIGHT® 330	
1000 x 600 x 5 mm	400
1000 x 600 x 10 mm	200
1000 x 600 x 15 mm	132
1000 x 600 x 20 mm	100
1000 x 600 x 25 mm	80
1000 x 600 x 30 mm	66
1000 x 600 x 40 mm	50
1000 x 600 x 50 mm	40

