

## PROMASIL®-1000L, -1100 SUPER



#### **Technical calcium silicates**

PROMASIL®-1000L and -1100 SUPER are large-size, lightweight insulating boards with very good thermal properties. Their homogeneous and stable mineral matrix structure guarantees excellent mechanical and thermal characteristics.

PROMASIL®-1000L boards are mechanically strong and vibration proof and have a good thermal stability up to 1000 °C.

PROMASIL®-1100 SUPER offers unique solutions in situations where conventional lightweight calcium silicate products cannot. It is the result of combining our PROMAXON® technology with the introduction of selected opacifiers in the mineral composition to further lower the thermal conductivity.

Technical data				
Grade		-1000L	-1100 SUPER	
Colour		white/grey	white/grey	
<b>Classification temperature</b>	°C	1000	1050	
Bulk density	kg/m <sup>3</sup>	300	300	
Cold compressive strength (perpendicular direction)	N/mm <sup>2</sup>	> 2.5	> 2.5	
Linear shrinkage				
1000 °C - 12h	%	0.5	-	
1050 °C - 12h	%	-	< 2	
Thermal conductivity				
200 °C	W/m K	0.081	0.075	
400 °C	W/m K	0.099	0.084	
600 °C	W/m K	0.126	0.101	
800 °C	W/m K	0.163	0.125	
Specific heat capacity	kJ/kg K	1.02	1.03	
Thermal expansion				
20-400 °C	K-1	5.4x10 <sup>-6</sup>	5.4x10 <sup>-6</sup>	
Chemical analysis				
SiO <sub>2</sub>	%	45-47	40-42	
CaO	%	43-45	38-40	
others	%	-	9-13	
LOI	%	9	9	

Delivery sizes				
Length	mm	2500		
Width	mm	1200		
Thickness	mm	25 / 30 / 40 / 50 / 60		

Other sizes are available on request.

Production tolerances				
Length and width	mm	± 3.0		
Thickness	mm	± 0.5		



# PROMASIL®-1000L, -1100 SUPER

#### **Properties & advantages**

- extremely low thermal conductivity
- low shrinkage
- low thermal mass, lightweight
- good mechanical strength
- high thermal stability
- large size format
- good workability

#### **Application areas**

PROMASIL® materials are used in various industrial applications as thermal back-up insulation in a refractory lining.

#### HEAVY INDUSTRY

- Aluminium industry: anode baking furnace and electrolysis cells
- Steel industry: smelting and heat treatment furnaces
- **Glass industry:** melting furnaces, heat treatment and foming furnaces
- **Ceramics industry:** bogie hearth furnaces, kiln cars
- **Cement industry:** heat exchangers and cyclone separators

#### OIL AND GAS INDUSTRY

- fired heaters
- pipe supports



All data contained in this publication are provided in good faith and are correct at the time of printing. Data are representative of production and are subject to normal production fluctuations, they should not be deemed to constitute or imply any warranty of performance, the user is held responsible for determining the suitability of the products for the given application. Errors and omissions excepted. All drawings and representations remain our exclusive property and cannot be used, totally or in part, without our prior written approval. Excerpts, reproductions, copies, etc. of our publications require our prior approval. This publication renders all previous ones invalid. Our terms of delivery and payment apply in the event of any claim. Promat and Microtherm are registered trademarks. © Copyright Etex NV, Brussels, Belgium. All rights reserved. **2017-09** 

### Etex Industry c/o Microtherm N.V., Industriepark-Noord 1, 9100 Sint-Niklaas, Belgium | T +32 (0)3 760 19 80 | F +32 (0)3 760 19 99 info@promat-industry.com | www.promat-industry.com

#### Working & processing

This PROMASIL® range of products can be easily worked and machined with woodworking tools.

When cutting to size, the maximum workplace concentration values for inhalable dust must be observed. Dust extraction is recommended. See product safety information sheet.

#### **Thermal conductivity**



MEAN TEMPERATURE (°C)

etex industry