

SIBREX® Refractory boards

SIBREX® refractory boards are made from ceramic aluminosilicate fibres, bonded with combined inorganic and organic bonding agents, and are used as a thermal insulant for temperatures up to 1100 °C. SIBREX® BIO refractory boards are made from alkali earth and silicon oxide fibres. They are supplied in three basic types:

- 1) SIBREX® 140 - soft boards with a bulk density of 140 kg/m³
- 2) SIBREX® 300 - rigid boards with a bulk density of 300 kg/m³
- 3) SIBREX® 300 BIO - rigid boards with a bulk density of 300 kg/m³

These types are suitable for numerous applications (e.g., high-temperature insulation and sealing). The boards are a convenient structural material for insulation of high-temperature plants in combination with heat-resistant bricks or concrete, where they work as an insulation and expansion layer of the outer envelope. SIBREX® 300 is very tolerant to static loads and easy to tool.

SIBREX® boards are convenient as thermal insulation wherever structures need to be protected from high temperatures and heat loss prevented: for instance, insulation for air heaters, blast furnaces, glass-melting furnaces, boiler doors, etc. All the applications achieve high energy efficiency, especially in cyclically working equipment, where the insulation properties of the boards are coupled with a considerably lower heat accumulation compared to conventional lining.

The boards can be cemented onto existing ceramic furnace lining using the VSK 1200 refractory cement or stove fitter's cement.

Advantages of using SIBREX® fibrous insulation boards:

1. up to 15-40% energy saved depending on furnace operation type
2. increased furnace time utilisation
3. increased furnace unit output
4. faster industrial furnace construction
5. improved operator working environment
6. faster capital investment repayment

Property	Unit	SIBREX® 140			SIBREX® 300			SIBREX® 300 BIO		
Bulk density	kg/m ³	140 ±25			300 ±40			300 ±40		
Length	mm	1000 ± 5			1000 ±5			1000 ± 5		
Width	mm	500, 750, ±2			500, 750, ±2			500, 750, ±2		
Thickness	mm	10, 13, 15, 20, 25, 30 ±2			10, 15, 20, 25 ±2			10,13, 15, 20, 25 ±2		
Humidity (max.)	%	3.5			3.5			3.5		
Loss by annealing (max.)	%	4			6			10		
Coefficient of thermal conductivity	W.m ⁻¹ .K ⁻¹	200°C	600°C	1000°C	200°C	600°C	1000°C	200°C	600°C	1000°C
		0.07	0.16	0.39	0.07	0.16	0.29	0.07	0.16	0.29
Compression strength at 10% deformation (min.)	kPa	-			130			130		
Shrinkage after heat exposition	%	3 (at 1100°C for 24 hrs)			4 (at 1100°C for 24 hrs)			3 (at 1050°C for 24 hrs)		
Flammability level		B: difficult to inflame			B: difficult to inflame			B: difficult to inflame		
Maximum application temperature	°C	1100			1100			1050		

We can supply other dimensions and cutouts as well depending on customer specifications.

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Certifikace:
ISO 9001
ISO 14001

