# **Product Information Sheet**



## Cervac Board S, Z & HD

### DESCRIPTION

Cervac Boards are rigid products made from Fiberfrax® Ceramic Fibre. Boards are vacuum formed from fibre containing slurry with organic & inorganic binders and mineral fillers. These are manufactured over a wide range of grades, densities, hardness, strengths, sizes & thicknesses.

These boards may be used as individual component of furnace linings or as hard hot face layer for Durablankets or as back-up insulation.

### **SHAPES**

By vacuum forming, a wide range of sizes and forms such as cones, sleeves, floats, observation / sight / peep doors tiles, etc. can be produced according to customer requirements.

#### **GENERAL CHARACTERISTICS**

Cervac Boards have the following outstanding characteristics:

- Low thermal conductivity & heat storage Highly resistance to thermal shock
- · High temperature stability
- Resistance to erosion
- Easy to cut / machine with standard tools

### **TYPICAL APPLICATIONS**

- High temperature furnace and kiln linings
- Back-up insulation for castable & bricks
- · Hot gas duct liner
- · Trough liners & covers
- Observation / sight / peep doors & plugs
- · Shapes for aluminum industry

Any new and/or special use of these products, whether or not in an application listed in our literature, must be submitted to our technical department for their prior written approval.



### TYPICAL PRODUCT PARAMETERS

Cervac Board	Z	S	HD
Typical Chemical Analys	Typical Chemical Analysis (fibre wt. %)		
$Al_2O_3$	28 - 32	38 - 42	37 - 41
SiO <sub>2</sub>	53 - 59	57 - 61	58 - 62
ZrO <sub>2</sub>	2 - 14	_	_
Fe <sub>2</sub> O <sub>3</sub> + TiO <sub>2</sub>	< 1	< 1	< 1
Others	< 1	< 1	< 1
Loss on ignition (wt. %)	3 - 6	3 - 6	3 - 6



## Cervac Board S, Z & HD



### TYPICAL PRODUCT PARAMETERS (cont.)

Cervac Board	Z	s	HD
Physical Properties			
Classification Temperature (°C)	1425	1260	1260
Density (kg/m³)	320 - 384	320 - 384	416 - 480
Hardness Shore Scale (min.)	40	40	50
Flexural Strength (kg/cm	2)		
Тур.	10.5	10.5	21
Spec.	7	7	14
Compressive Strength (k	(g/cm²)		
Typ. 10% Comp.	3.5	3.5	7
25% Comp.	7	7	14
Spec. 10% Comp.	2.8	2.8	5
25% Comp.	5.5	5.5	10.5

The above strengths are for thickness up to 25mm, for higher thickness the strength will be lower.

Thermal Conductivity (W/mK)			
Mean Temp.			
250°C	0.10	0.10	0.11
550°C	0.11	0.11	0.12
850°C	0.14	0.14	0.15
1000°C	0.19	0.19	0.20

Thermal Conductivity figures are empirical values (average) based on experience.

Permanent Linear Shrinkage (%) 24 hour soak			
Temp.			
1100°C	-	1	1
1200°C	2	2.5	2.5
1300°C	2.5	_	_
1400°C	3	-	_

For specification add 0.5% to above shrinkage value. Water Repellent boards are available in Z, S & HD Grade.

#### **AVAILABILITY**

Thickness (mm)	Pieces per Carton
	Size: 500 x 1000 & 600 x 900
6	20
12	11
19	7
25	6
38	4
50	3
75	2

Other densities, thicknesses  $\slash$  sizes may be available on request subject to minimum order requirements.

### **SHAPES**



Classification temperature refers to the maximum short term temperature limit. The maximum continuous use limit depends upon application conditions. For certain applications continuous use temperature limits may be significantly reduced. For assistance or clarification please contact your nearest Alkegen Engineering office.

### HANDLING INFORMATION

A Material Safety Data Sheet has been issued describing the health, safety and environmental properties of this product, identifying the potential hazards and giving advice on handling precautions and emergency procedures. This must be consulted and fully understood before handling, storage or use.

Note: All product data is nominal and does not represent a specification. All data and statements concerning these products may be considered as being indicative of representative properties and characteristics obtainable. We make no warranty, expressed or implied, concerning actual use or results because of industry specific influences.

Form A-5168 Effective 09/22 © 2022 Alkegen All Rights Reserved Page 2 of 2

## Alkegen

Email: info@Alkegen.com
Telephone: North America & Asia

716-768-6500

Europe, Middle East & Africa

1-800-635-4464

