



### Introduction

**SoliBoard™ High Temp Series consists of boards which are designed for a special purposes in high temperature applications. Based on a either a blend of PCW combined with our HA fiber, or PURE PCW fiber chemistries. Developed for extreme durability, high temperature performance and fit for the most demanding applications.**

Utilizing our continuous production process with state of the art drying techniques we are able to manufacture a uniform, lightweight, low shot and stable board to a thickness of 4 inches at high consistency, quality and performance.

#### SoliBoard™ PCW35 HT-grade

SoliBoard™ PCW35 HT-grade is combining the advantages of polycrystalline Wool (PCW) fibers with the unique features of the SoliWool HA. Delivering minimum shrinkage at high temperature exposure, high temperature stability up to 1500°C, but without the costs of pure PCW boards.

#### SoliBoard™ PCW100 HT-grade

With a classification temperature of 1650°C the top-end of the high temperature board series is represented by our SoliBoard™ PURE PCW. Made from purely PCW mullite fibers and alumina fillers we have entered a new dimension. We make no compromises with our SoliBoard™ PURE PCW and quality and reliability has been the key elements in the development of the material giving you the ensurance that your furnace delivering when required.

#### SoliBoard™ PCW100 HT-grade INO

**INO** stands for 'inorganic' and means that the boards already get fired after production. As a result, there is hardly any fumes or loss of strength at first firing. In addition it improves the mechanical properties: increase density, improves fire resistance, stability and structural integrity.

SoliBoard High Temp Series is complimented by an extensive range of standard refractory ceramic fiber (RCF), High Strength Boards and low bio persistence (LBP) fiber boards.

### Type

Boards from either high temperature Poly Crystalline Wool (PCW) blended with Refractory Ceramic Fiber (RCF) or manufactured from 100% PURE Poly Crystalline Wool (PCW) fibers.

### Temperature range

**SoliBoard™ PCW35 HT-grade** has a classification temperature of 2750°C.

**SoliBoard™ PCW100 HT-grade** has a classification temperature of 1650°C.

**SoliBoard™ PCW100 HT-grade INO** has a classification temperature of 1650°C.

The maximum continuous use temperature provided on the datasheet is guideline and only applicable in a clean oxidizing atmosphere.

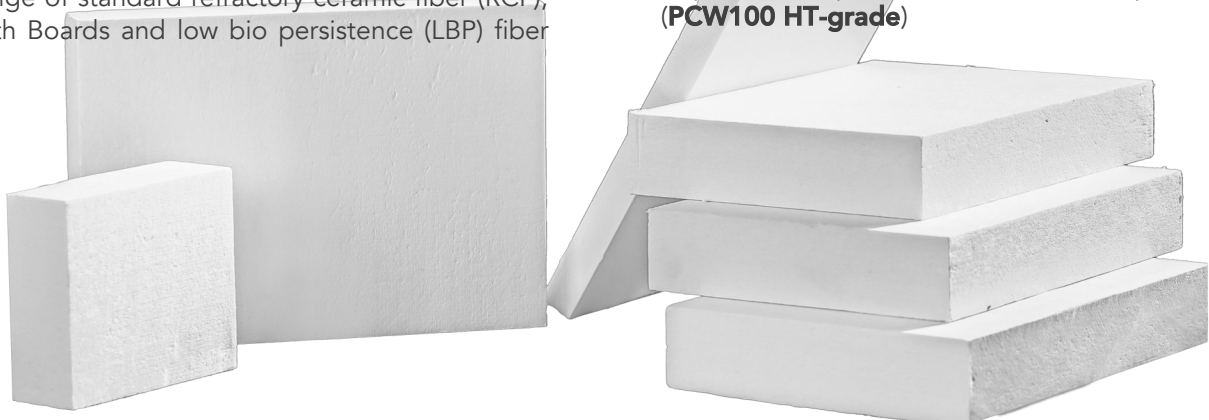
### Typical applications

- Thermal insulation for high temperature furnaces
- Hot face lining in furnaces with low concentrations polutions\*
- Hot face lining in furnaces operating in reducing atmospheres (**PCW100 HT-grade**)\*
- Laboratory-, vacuum- and dental kilns requiring stability and low off-gassing (**PCW100 HT-grade INO**)
- General technical insulation of furnaces and technical installations

\* ask Vulcor for advise on your specific application.

### Benefits

- Excellent insulation performance
- Excellent thermal stability and minimal shrinkage
- Resistance to most common polutions
- Low organic binder contents and off-gassing (**PCW100 HT-grade INO**)
- Cost effective solution versus pure PCW boards (**PCW35 HT-grade**)
- Capability to operate in reducing atmospheres (**PCW100 HT-grade**)



Properties measured	Standard	Unit	SoliBoard™ PCW35 HT*	SoliBoard™ PCW100 HT	SoliBoard™ PCW100 HT INO
Grade			PCW/RCF blend	PCW	PCW
Colour			white	white	white
Classification temperature		°F	2750	3000	3000
Continuous use temperature		°F	2500	2730	2730
Density		PCF	18.5	25	25
Loss on ignition		wgt%	< 8	< 3	< 3
Compressive strength	EN ISO8895				
@ 5% deformation		PSI	> 28		
@ 10% deformation		PSI	> 35	> 30	> 30
Permanent linear shrinkage	EN 1094-7	%			
@2600°F			< 1.5		
@2900°F				< 1	< 1
Thermal conductivity	ASTM C201	BTU·in/hr·ft²·°F			
@ 500°F			0.38	0.45	0.45
@ 1000°F			0.62	0.66	0.66
@ 1500°F			1.00	1.05	1.05
@ 1800°F			1.28	1.23	1.23
@ 2000°F			1.56	1.52	1.52
@ 2200°F			1.84	1.75	1.75
Chemical composition (after firing),	ISO12667	%			
Al2O3			57-60	65-70	65-70
SiO2			40-43	30-35	30-35
ZrO2			-	-	-
Other			< 1	< 1	< 1

\*Available as INO upon special request.

### Availability

SoliBoard is available in standard dimensions of 36x23.62 inch, supplied in carton boxes with a thickness ranging from 1/2 inch to 4 inches. Please contact our sales support for packaging details.

### Product range

SoliBoard is part of an extensive product range supplied by Vulcor Insulation. Vulcor Insulation is supplying insulation solutions from cryogenic to high temperature applications. All products offered by Vulcor are manufactured in house or sourced from exclusive trusted 3<sup>rd</sup> party partners.

### Technical support

Vulcor Insulation provides specifiers and customers with guidance on all aspects of the materials selection for their application, the installation and compliance with relevant regulations and performance standards.

For additional information about product performance or to identify the recommended product for your application, please contact the team at Vulcor Insulation.

### Contact

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