

## Introduction

**SoliBloc™ modules are unique monolithic fiber modules that incorporate our premium Generation III fiber technology. They are available in both Refractory Ceramic Fiber and Low Bio Persistence fiber variants. These modules offer exceptional thermal insulation, high strength, and are suitable for applications with high gas velocities.**

The SoliBloc™ modules consist of two sections of SoliSlab™ arranged in an edge grain orientation. These sections are held together by two stainless steel tubes placed transversely through the modules, away from the hot face. The edge grain orientation and interlocking of the fibers enable the SoliBloc™ modules to withstand high gas velocities without fiber erosion.

SoliBloc™ modules are available in densities from 10 to 14 PCF in a standard dimension of 12x12 inch. Thanks to our high fiber index, our 14 PCF modules deliver the same performance as a traditional 15 PCF modules.

### SoliBloc™ X-grade

SoliBloc X-grade is using the latest spinning technology to deliver a better performance in comparison to a standard fiber modules. With a classification temperature of 2300°F it is recommended for use up to 2000°F.

### SoliBloc™ ZR-grade

Rated at 2600°F classification temperature and commonly approved for applications in the Petrochemical and Iron and Steel industry where the standard RCF fiber is insufficient due to high process temperatures.

SoliBloc modules are anchored to the furnace casing with one of our 3 standardized anchoring systems.

- Center fix direct weld system
- Center fix tube and stud system
- Side fix anchor system system

All offered anchoring systems come with all required items for the fixing system and the hardware is offered in various grades of stainless steel.

## Type

Monolithic Fiber Modules manufactured from high temperature Refractory Ceramic Fiber.

## Temperature range

**SoliBloc™ X-grade** modules have a classification temperature of 2300°F.

**SoliBloc™ ZR-grade** modules have a classification temperature of 2600°F.

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

## Typical applications

- Thermal insulation for furnace lining
- Furnace lining in Ceramics and Glass
- Thermal insulation for Petrochemical Industry (like process heaters, reformers, cracker units)
- Chemically stable insulation for Steel Treatment (reheating-, annealing-, and rotary hearth furnaces)
- Linings in Ceramic Industry (tunnel kilns and intermittent kilns)
- General technical insulation of furnaces and technical installations

## Benefits

- Proven technical solution
- Low shot technology
- Excellent insulation performance
- High handling strength
- Unaffected by most chemicals
- Excellent thermal stability
- Resistant to thermal shock



Properties measured	Standard	Unit	SoliBloc™ X-grade			SoliBloc™ ZR-grade		
Grade			RCF			RCF		
Colour			white			white		
Classification temperature		°F	2300			2600		
Continuous use temperature		°F	2000			2400		
Density		PCF	10	12	14	10	12	14
Thickness range		inch	≥ 4			≥ 4		
Permanent linear shrinkage	EN1094-7	%						
@ 2200°F			< 3					
@ 2550°F						< 3		
Thermal conductivity	ASTM C201	BTU-in/hr-ft²·°F						
@ 500°F			0.51	0.50	0.49	0.54	0.51	0.49
@ 1000°F			1.06	0.95	0.87	1.10	0.98	0.87
@ 1500°F			1.68	1.56	1.42	1.77	1.63	1.42
@ 1800°F			2.20	2.00	1.86	2.27	2.07	1.86
@ 2000°F			2.56	2.36	2.22	2.65	2.45	2.24
Chemical composition,	ISO12677	%						
SiO2			52-55			44-50		
Al2O3			45-47			35-38		
ZrO2			-			15-17		
Other			< 1			< 1		

## Contact

### Headoffice

Vulcor Insulation BV  
Komkleiland 4  
6666 MG Heteren  
The Netherlands  
T: +31 (0)488 700 202  
E: sales.support@vulcor.com  
**www.vulcor.com**

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The productlabel 'Soli', the company name 'Vulcor' and the 'ULS' technology are registered.

## Availability

In standard size the modules are packed in carton boxes of 12-½x12-½x38 inch (holding multiple modules) with 24 boxes per pallet. Please refer to the list below for packaging details of the SoliBloc modules, other sizes are available on request.

Length (inch)	Width (inch)	Thickness (inch)	Pieces per carton	Pieces per pallet
12	12	4	9	216
12	12	6	6	144
12	12	8	5	120
12	12	10	4	96
12	12	12	3	72

## Tailor to fit

We offer our SoliBloc™ in standard straight 12x12 inch modules. For projects we also offer tailor modules to meet specific engineering requirements, such as L-shaped corner modules and other special shapes.

Please let us know if you require any further information or have specific engineering needs. We are dedicated to providing high-quality fiber modules that meet your thermal insulation and strength requirements.

## Product range

SoliBloc 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.