

Data sheet

ENGLISH

# Alphawool® VF Board

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**Alphawool® VF board is a high temperature vacuum formed board made of polycrystalline bulk fibres and binders.**

Alphawool® VF board is rigid with very good dimensional resilience and has low shrinkage up to its classification temperature whilst retaining good thermal conductivity. Alphawool® VF board is resistant to thermal shock.

Both the unfired and fired materials can be easily cut or machined.

## Type

Vacuum formed board manufactured from Alphawool bulk fibres.

## Classification temperature

1600°C (EN-1094-3)

The maximum continuous use temperature depends on the application. Please contact Morgan Advanced Materials, Thermal Ceramics for advice.

## Typical applications

- Expansion joints
- Furnace lining
- Electrical kilns
- Laboratory equipment
- Glass & Petrochemical industry

## Benefits

- Not classified as dangerous under EC Directive 67/548/EEC or according to self-classification guidelines (please see MSDS 219-3-EURO)
- High chemical purity
- Excellent insulating performance
- Excellent thermal stability
- Excellent chemical stability in industrial process conditions
- Low heat storage
- Resistance to thermal shock
- Can be easily cut

## Special treatment

Alphawool hardener or Alphawool cement may be applied should it be necessary to surface treat or glue to other substrates.

Alphawool® VF board can be pre-fired should it be necessary.

## Standard dimensions

Width:	500mm
Length:	1000mm
Sanded thickness:	10mm, 15mm, 20mm, 25mm, 30mm, 35mm, 40mm and 50mm
Un-sanded thickness:	10mm, 15mm and 25mm

Other dimensions available on request.



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# Alphawool® VF Board

## Metric information

		Alphawool VF board
<b>Classification temperature</b>		1600°C
<b>Colour</b>		White/tan
<b>Density</b>		250kg/m <sup>3</sup>
<b>Modulus of rupture</b>		> 0.70MPa
	on green product	> 0.60MPa
	after 5 hours at 1600°C	
<b>Loss on ignition</b>		<8.0%
<b>Permanent linear shrinkage after 5 hours isothermal heating at 1600°C</b>		< 1.5%
<b>Thermal conductivity (ASTM-C201) at mean temperature</b>		
	400°C W/m K	0.08
	600°C W/m K	0.10
	800°C W/m K	0.13
	1000°C W/m K	0.16
	1200°C W/m K	0.19
<b>Typical chemical analysis % by weight</b>		
	Al <sub>2</sub> O <sub>3</sub>	88-90
	SiO <sub>2</sub>	8-10
	Others	0-4

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**SUPERWOOL®** is a patented technology for high temperature insulation wools which have been developed to have a low bio persistence (information upon request). **SUPERWOOL®** products may be covered by one or more of the following patents, or their foreign equivalents:

**SUPERWOOL® PLUS** and **SUPERWOOL® HT** products are covered by patent numbers: US5714421 and US7470641, US7651965, US7875566, EP1544177 and EP1725503 respectively.

A list of foreign patent numbers is available upon request to Morgan Advanced Materials plc.

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