

Alphawool® Board

Product Data Sheet



Product Description

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

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

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

Special Treatment

Alphawool Hardener or Cement may be applied should it be necessary to surface treat or glue to other substrates.

Alphawool Board can be pre-fired should it be necessary.

Features

- Not classified as dangerous under EC Directive 67/548/EEC or according to self-classification guidelines
- 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

Applications

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

Alphawool® Board

Product Data Sheet



Properties		Alphawool Board
Region of Manufacture		EMEA
Colour		White / Tan
Classification Temperature, °C (°F), ISO 10635		1600 (2912)
Density, kg/m ³ (pcf), ASTM C612-14		250 (15.6)
Permanent Linear Shrinkage, %, ISO 10635		
	Classification Temperature	<1.5
Modulus of Rupture, Unfired, MPa (psi), ASTM C165		0.7 (101.5)
Loss of Ignition, %, 650°C (1202°F)		<8.0
Chemical Analysis, %		
	Alumina, Al ₂ O ₃	88 - 90
	Silica, SiO ₂	8 - 10
	Other	0 - 4
Thermal Conductivity, W/m•K (BTU•in/hr•ft ² •°F), ASTM C201		
	400°C (752°F)	0.08 (0.56)
	600°C (1112°F)	0.1 (0.69)
	800°C (1472°F)	0.13 (0.90)
	1000°C (1832°F)	0.16 (1.11)
	1200°C (2192°F)	0.19 (1.32)

Standard Dimensions and Availability

Alphawool Board is manufactured in our EMEA region, and is available globally.

Please contact your regional Morgan Advanced Materials - Thermal Ceramics representative to support providing specific packaging availability for your local business needs.

Standard dimensions, W x L, mm (in)	Thicknesses, mm (in)
500 x 1000 (20 x 40)	Sanded: 10, 15, 20, 25, 30, 35, 40, 50 (0.4, 0.6, 0.8, 1, 1.2, 1.4, 1.6, 2)
	Unsanded: 10, 15, 25 (0.4, 0.6, 1)
Other dimensions available upon request	

The product(s) represented are intended for industrial refractory applications. The values and application information in this datasheet are given for guidance only. The values and the information given are subject to normal manufacturing variation and may be subject to change without notice. Morgan Advanced Materials – Thermal Ceramics makes no guarantees and gives no warranties about the suitability of a product, and you should seek advice to confirm the product's suitability for use with Morgan Advanced Materials.