

Customised Ceramic Fibre Products

“Kaowool™ VF Shapes”

Material Type: Vacuum formed shapes.

Description

Kaowool™ VF Shapes are insulating products made from a mixture of refractory ceramic fibre by vacuum forming. This process allows the production of a variety of configurations, tailored to the particular application and ranging from simple sections (such as sleeves, cones) to complex shapes. Compositions are available for service temperatures from 1260°C to 1600°C.

Shapes can also be produced in a strong composition which gives higher strength and density. Thermal properties are similar to the normal grades but with improved resistance to erosion.

The unfired material can be easily cut or machined.

Kaowool 1260 LB is a flexible shape which shows good dimensional resilience after compression and make utilization of these shapes very easy where rigid shapes are unsuitable.

All shapes have low shrinkage at temperatures within their service rating and retain the properties of high insulation light weight and have resistance to thermal shock which are the main properties of Kaowool ceramic fibre.

Classification Temperature

From 1260°C up to 1600°C

The maximum continuous use temperature depends on the application. Refer to our company for advice.



Applications

These versatile products can be used where rigid shapes, self-supporting are required for high temperature insulation (according to the mix). Kaowool 1260 LB is particularly recommended for sealing applications.

Special Treatment

Kaowool™ Hardener or Kaowool™ White Cement may be applied, if required, to shapes in order to provide a protective surface coating up to a temperature of 1260°C.

Main Properties (23 °C / 50% Humidity)	1260	Strong	1260 LB	1400	1600
Classification Temperature, °C	1260	1260	1260	1400	1600
Colour	White / Tan				
Density, kg/m ³	280	330	200	280	320
Modulus of Rupture, MPa Unfired	>1.4	2.7	Flexible	>0.99	>0.4
Compressive Strength, MPa (5% relative deformation)	-	-	0.56	-	-
High Temperature Performance Approx. Weight loss on first firing,%	5-7				
Thermal Conductivity, W/m.K (ASTM C-201)					
200 °C	0.07	0.06	0.07	0.06	-
400 °C	0.09	0.09	0.09	0.08	0.08
600 °C	0.11	0.12	0.11	0.10	0.11
800 °C	0.15	0.16	0.15	0.13	0.14
1000 °C	-	-	-	0.18	0.16
1200 °C	-	-	-	0.23	0.19
1400 °C	-	-	-	-	0.25

The values given herein are typical average values obtained in accordance with standard test methods and subject to normal manufacturing variations. They are supplied as technical data and may change without notice. Contact our company to obtain detailed information.