

Kaoclad™ “Wet Blankets”

Material Type: Moist impregnated mouldable sheets.

Classification Temperature

1260 °C and 1400 °C

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

Description

Kaoclad™, is the combination of ceramic fiber blanket with an inorganic hardening agent, and it has excellent handling characteristics, both wet and dry. It can be used as curved or angled launders in different casting areas. It is supplied as packed in sealed polyethylene bags to keep a moist structure of sheets. After drying (preferably between 60 °C and 90 °C), it provides strong, rigid yet lightweight insulation with texture.

Provided that the bags remain sealed and are maintained at temperatures within the range 10°C to 50°C. However, it is important to protect the material against frost.

Features

- Good wet strength facilitates shaping and installation.
- After drying, provides lightweight but strong and abrasion-resistant protection to soft substrate insulation.
- High thermal insulation features.
- Can be used to make simple rigid shapes.
- Sheet sizes of 915x610 mm and 2400x610 mm fit standard blanket stud pattern.
- Fully inorganic, no smoke, no smell etc. in the use.



Applications

The main use of Kaoclad™ is as a protective hot face layer covering soft substrate fiber and other products in nonferrous applications and where a contoured profile is required, as well as for insulation of ladles and metal delivery systems in ferrous applications.

- As a protective layer for lining ladles, launders and distribution boxes.
- The inner face of heaters.
- Irregular surfaces.
- Pipe insulation.
- Insulation of steam turbines and ancillary plant.
- Ductwork (when gas flow rate and particle erosion is too high for blanket).
- Blast furnace tuyeres.
- Element hanger anchor protection.

Main Properties

	1260	1400
Classification Temperature, °C	1260	1400
Properties measured at ambient conditions (23°C / 50% RH)		
Colour	White / Buff	White / Buff
Density, kg/m ³		
(Wet)	700-800	700-800
(Dry)	275	275
Modulus of Rupture, MPa	0.45	0.45
Tensile Strength, MPa (Wet)	0.12	0.14
High Temperature Performance	After 24 hours at 1200 °C	After 24 hours at 1300 °C
Permanent Linear Shrinkage, %	< 3	< 4
Thermal Conductivity, W/m.K		
500 °C	0.10	0.10
750 °C	0.14	0.14
1000 °C	0.20	0.20
Standard Dimensions, mm	2400x610x15 2400x610x10 2400x610x5 915x610x25 915x610x15 915x610x10 915x610x5	2400x610x15 2400x610x10 2400x610x5 915x610x25 915x610x15 915x610x10 915x610x5

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.