

Superwool[®] HT B Board

Product Data Sheet

Product Description

Superwool HT B Board has the same properties as the other low biopersistent fibre products in the Superwool family. These Boards are made from pure raw materials and have excellent thermal and physical properties to meet the demands of high temperature applications. With its excellent resistance to high temperatures and its resistance to wetting by aluminium liquids, Superwool is an alternative to traditional solutions.

The fibres are stable and chemically resistant, with the exception of hydrofluoric acid, phosphoric acid and strong bases (e.g. sodium hydroxide, potassium hydroxide). Even accidental leakage of oil or water does not affect the performance of Superwool, which dries to its original thermal and physical properties.

Ideal for wall-hung boilers in combustion chambers, Superwool HT B Board offers maximum weight savings, easy installation and excellent thermal insulation. The maximum continuous use temperature depends on the actual application.

Features

- Low biopersistent
- High strength, excellent flexural and compressive strength
- Low thermal conductivity
- Light weight
- Good resistance to erosion
- Wide range of thickness and size options
- Can be cut with common tools

Advantages

- Rigid and self-supporting fibre insulation panels
- Energy efficient and highly effective insulation
- Up to 50 % reduction in thickness of backing insulation compared to fire bricks and castable materials
- Low heat storage
- Easy to handle, cut and install

Applications

• Designed for combustion chamber of wall-hung boilers

Environmental & Health Safety

Superwool low biopersistent fibres manufactured by Morgan Advanced Materials are not classified as carcinogenic by IARC or under any national regulations on a global basis. They have no requirements for warning labels under GHS (Globally Harmonised System for the classification and labelling of chemicals).

In Europe, Superwool fibres meet the requirements specified under Note Q of European Regulation EC/1272/2008 (on Classification, Labelling and Packaging of substances and mixtures). All Morgan Advanced Materials Superwool low biopersistent fibre products are therefore exonerated from classification and labelling as hazardous in Europe.



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Properties	Superwool HT B Board
Classification Temperature, °C(°F)	1200 (2192)
Modulus of Rupture, Mpa	1.5
Density, kg/m ³ , ASTM C612-14	370
Compressive strength, @10%deformation, Mpa, ASTM C165	0.3
Permanent Linear Shrinkage,%, 24 hours	≦2.5 (1200°C)
Loss of Ignition, after heating at 1000°C for 2 hours	6.5
Thermal Conductivity* (W/m•k, BTU•in/hr•ft ² •°F), ASTM C 201	
200°C	0.06
400°C	0.08
600°C	0.11
800°C	0.14
1000°C	0.19
Chemical Analysis , %	
Alumina, Al ₂ O ₃	4-10
Silica, SiO ₂	65-75
Calcium oxide + Magnesium oxide, CaO + MgO	15-25
Ferric oxide + Titanium oxide, Fe ₂ O ₃ +TiO ₂	<2
Alkalies, Na ₂ O+K ₂ O	<1.5

* The thermal conductivity is for design purposes only and is not used as a basis for product judgement.

Standard dimension and Product availability

Packaging and suitability for China operations only

Dimensions: Standard Length 900, 1000,1200mm, Standard Width 600 and 1000mm.

Fibre board sizes and thicknesses can be tailored to special requirements, standard thickness 6 to 40mm.

Whilst the values and application information in this datasheet are typical, they 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 - Thermal Ceramics.