

Data sheet

Superwool® Pyro-Log

ENGLISH

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Description

Superwool® Plus and Superwool® HT Pyro-Log are the only 152mm (6") thick needled blankets available in standard uncompressed densities up to 240kg/m³ (15 lb/ft³).

Spun-fiberised Superwool® Plus Pyro-Log and Superwool® HT Pyro-Log have exceptional uniformity in dimensions and naturally low shot content.

Superwool® Plus and Superwool® HT Pyro-Log offer a unique solution to the problems encountered in designing linings for use in the toughest of furnace environments.

Type

Superwool Plus Pyro-Log:

High density blanket slabs made from high temperature insulation wool.

Superwool HT Pyro-Log:

High density needled monolithic slabs made from high temperature insulation wool.

Classification temperature

Superwool® Plus Pyro-Log: 1200°C (2192°F) (EN 1094-1)

Superwool® HT Pyro-Log: 1300°C (2372°F)(EN 1094-1)

The maximum continuous use temperature depends on the application. Unaffected by most chemicals except strong alkalis, phosphoric acid and molybdenum. For further advise please contact your local Morgan Thermal Ceramics partner.

Benefits

Superwool® Plus & HT Pyro-Log

- Pyro-Log® is available in standard uncompressed densities up to 240kg/m³. Lubricant in the Log allows for extra compression during installation, ensuring good, tight joints.
- To accommodate irregular section Pyro-Log® is easily cut and shaped on site, or pre-shaped in the factory
- The unique Log structure allows us to produce L-shaped corner modules which ensures join-free linings around corners
- Thermal shock resistance
- Good acoustic insulation
- Exonerated from any carcinogenic classification under nota Q of directive 97/69 EC

Superwool® Plus Pyro-Log only

- On firing it converts from a relatively soft, easily compressible slab to a tough structure
- The tough structure obtained after firing confers some load bearing capacity
- Exonerated from any use restriction under annexe V number 7.1 of the German hazardous substances regulation

Superwool® HT Pyro-Log only

- Combination of high density and opacity of its fibres to infra-red radiation maintains the low thermal conductivity of Pyro-Log® to high temperature
- Pyro-Log® has the unique characteristic that on firing it converts from a relatively soft, easily compressible slab to a semi-rigid, near monolithic structure
- The almost monolithic structure obtained after firing confers Pyro-Log® some load bearing capacity which can be utilised in lightly loaded hearths
- No reaction with alumina based bricks in application in the range of the typical use temperature



SDS:
EU: 144
NA: n/a
GHS: n/a

Data sheet

Metric information

Superwool® Pyro-Log

	Superwool Plus Pyro-Log modules		Superwool HT Pyro-Log modules		
Classification temperature, °C	1200		1300		
Colour	white		white		
Density, (uncompressed), kg/m ³	160	192	160	192	240
Loss on ignition, % after 2 hours heating @800°C	<0.25		< 0.25		
Permanent linear shrinkage, EN 1094-1 after 24 hours isothermal heating, % @1000°C	< 1.5		-		
after 100 hours isothermal heating, % @1000°C	-		0.20		
@1100°C	-		0.50		
@1200°C	-		0.80		
Specific heat capacity, kJ/kg.K @1090°C	1.05		1.22		
Thermal conductivity, ASTM C-201, W/m K @200°C	-	-	0.07	0.07	0.07
@400°C	0.11	0.09	0.14	0.12	0.10
@600°C	0.17	0.15	0.21	0.17	0.15
@800°C	0.24	0.21	0.30	0.25	0.22
@1000°C	0.32	0.28	0.40	0.33	0.29
@1200°C	-	-	0.54	0.44	0.39
Chemical composition, %					
SiO ₂	62 - 68		70 - 80		
CaO+MgO	-		18 -25		
CaO	26 - 32		-		
MgO	3 - 7		-		
Others	< 1		< 3		

Availability and Packaging

Normally available in slabs 152mm thick.

Standard log size 1000mm x 610mm x 152mm.

Special sizes (subject to minimum order requirements) cut to order from the overall log size of 11940mmx1220mmx152mm

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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.

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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