

Superwool® Plus Blankets Aluminium Faced

Product Data Sheet



Product Description

Superwool Plus Blankets Aluminium Faced features exceptional thermal and physical properties. Superwool Plus Blankets Aluminium Faced are manufactured using patented low shot technology providing ultra low shot fibres resulting in improved handleability and nuisance dust is effectively eliminated. The blankets are flexible, soft to the touch and less irritating during use.

Superwool Plus Blankets Aluminium Faced are designed to give users greater flexibility in areas where surface protection for the blanket may be required. These blankets exhibit outstanding insulating properties at elevated temperatures and have excellent thermal stability and retain their original soft fibrous structure up to its maximum continuous use temperature.

The Superwool Plus Blanket is needled from both sides and possess high strength before and after heating, do not contain binder or lubricant and do not emit any fumes or smell during the first firing.

Superwool Plus Blankets Aluminium Faced are available with a factory-applied covering of scrim-reinforced aluminium foil:

- 20R Aluminium is a 20 micron thick on one side, foil is silver
- 40R Aluminium is a 30 micron thick on one side, foil is silver

Features

- Superwool Blankets are immune to thermal shock
- Fibres are opaque to infra-red and so maintain their low thermal conductivity to high temperature
- Fibres absorb very little energy on heating
- Fibres are high purity and non-corrosive
- Fibres are flexible and resilient to mechanical damage

Applications

- Power generation especially HRSG duct insulation
- Industrial and Commercial Chimney insulation
- Furnace, Boiler and Heater linings
- Pipe wrap
- Back-up linings in kilns and furnaces
- Consumer goods
- Storage heater insulation
- Metals applications like launder covers
- Welding stress relief

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.

Superwool® Plus Blanket

Aluminium Faced

Product Data Sheet



Properties

Superwool Plus Blanket Aluminium Foil Faced	
Colour	White
Classification Temperature, °C (°F)	1200 (2190)
Continuous Use Temperature, °C (°F)	1050 (1920)
Melting Temperature, °C (°F)	1325 (2400)
Tensile Strength, average, kPa (psi), EN 1094-1	
Measured blanket density, kg/m ³ (pcf), 64 (4)	30 (4.35)
80 (5)	45 (6.53)
96 (6)	50 (7.25)
128 (8)	75 (10.88)
160 (10)	90 (13.05)
Chemical Analysis, %	
Silica, SiO ₂	62 - 68
Calcium oxide, CaO	26 - 32
Magnesium oxide, MgO	3 - 7
Other	<1
Thermal Conductivity, W/m·K, per ASTM C201	

Superwool Plus Blanket Aluminium Foil Faced				
Density, kg/m ³	64	96	128	160
200°C	0.06	0.05	0.05	0.04
400°C	0.11	0.09	0.08	0.07
600°C	0.15	0.14	0.12	0.11
800°C	0.24	0.21	0.18	0.16
1000°C	0.36	0.29	0.25	0.23

Product Availability

Superwool Plus Blankets Aluminium Faced are manufactured in Europe. Please contact your regional Morgan Advanced Materials - Thermal Ceramics representative to support providing specific packaging availability for your business needs.

Thickness	20R	40R	20R	40R	20R	40R	20R	40R	20R / 40R
	6mm	13mm	20mm	25mm	38mm	50mm			
Density kg/m ³									
64	No	No	No	Yes	No	Yes	No	Yes	Yes
96	No	No	No	Yes	No	Yes	No	Yes	Yes
128	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes
Roll Length	21.60m	14.64m	9.76m	7.32m	4.88m	3.66m			

40R Aluminium Facing - Using Water Repellant Blanket as substrate					
Thickness	13mm	20mm	25mm	38mm	50mm
Density kg/m ³					
96	No	No	No	Yes	Yes
128	No	No	Yes	Yes	Yes
Roll Length	14.64m	9.76m	7.32m	4.88m	3.66m

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.

Publication Date: 24 May 2022
Code: BU.30-CS
2 of 2

www.morganthermalceramics.com
Email: marketing.tc@morganplc.com
Thermal Ceramics is a business of Morgan Advanced Materials