

# Superwool<sup>®</sup> Blanket

**Product Information** 



Superwool is manufactured from pure raw materials and processed to offer excellent performance in high-temperature applications. Superwool offers an alternative to traditional solutions due to its high refractoriness and excellent non-wetting characteristics with molten aluminum.

Superwool provides stability and resistance to chemical attack. Exceptions include hydrofluoric acid, phosphoric acid and strong alkalies (i.e. NaOH, KOH). Superwool is unaffected by incidental spills of oil or water. Thermal and physical properties are restored after drying.

Superwool is ideally suited to individual applications and is available in a wide range of thicknesses and densities. The maximum continuous use temperature depends on the application. Refer to your local Thermal Ceramics representative for advise

### **Type**

Alkaline Earth Silicate (AES) Wool CAS number: 329211-92-9

#### **Features**

- Low biopersistence
- Thermal stability
- Low heat storage
- · Good resistance to tearing
- Flexible and resilient
- · Immune to thermal shock
- Excellent thermal insulating performance
- · Based on patented technology

## **Applications**

- · Furnace kiln, reformer and boiler lining
- Laboratory ovens
- · Furnace door lining and seals
- Furnace repair
- Annealing furnace linings
- · Investment casting mold wrap
- · Stress relieving blankets
- Reusable steam and gas turbine insulation
- · Expansion joints packing
- · High temperature gasketing
- Fire protection
- · Acoustical service
- · Cryogenic insulation

# **Superwool Blanket**

Product Information

Physical Properties	Blanket 607	Blanket 607 MAX
Color	white	white
Continuous Temperature Use Limit, °F (°C	) 1832 <i>(1000)</i>	1832 <i>(1000)</i>
Classification Temperature Rating, °F (°C)	2012 <i>(1100)</i>	2300 <i>(1260)</i>
Melting Point, °F (°C)	2680 <i>(1471)</i>	2730 <i>(14</i> 99)
Density, pcf (kg/m³)	4*, 6, 8, 10 <i>(64, 96, 128, 160)</i>	4*, 6, 8, 10 <i>(64, 96, 128, 160)</i>
Thickness, in (mm)	½ - 2 <i>(6.25 - 50)</i>	½ - 2 <i>(6.25 - 50)</i>
Width, in (mm)	24, 48 (600, 1200)	24, 48 (600, 1200)
Length, ft (m)	15**, 25 <i>(4.5 - 7.5)</i>	15**, 25 <i>(4.5 - 7.5)</i>
Typical linear shrinkage, nominal % 24 hrs		
@ 1000°F (538°C)	2	_
@ 1800°F (982°C)	3	_
@ 2282°F (1250°C)	_	<2
Chemical Analysis		
Silica, SiO <sub>2</sub>	60 - 70	60 - 70
Calcium Oxide, CaO	25 - 35	16 - 22
Magnesium Oxide, MgO	4 - 7	12 - 19
Zirconia, ZrO <sub>2</sub>	_	-
Alumina, Al <sub>2</sub> O <sub>3</sub>	trace	trace

Thermal Conductivity, Btu•in/hr•ft²•°F (w/m•k) (ASTM 201)

\* 4pcf only available in ½ up to 2"

	Blanket 607	Blanket 607	Blanket 607 MAX	Blanket 607 MAX
Mean temperature	(8 pcf)	(6 pcf)	(8 pcf)	(6pcf)
@ 500°F (260°C)	0.42 (0.06)	0.46 (0.07)	0.42 (0.06)	0.46 (0.07)
@ 1000°F (538°C)	0.88 (0.13)	1.02 <i>(0.15)</i>	0.88 (0.13)	1.02 <i>(0.15)</i>
@ 1500°F (816°C)	1.53 <i>(0.22)</i>	1.78 (0.26)	1.53 <i>(0.22)</i>	1.78 <i>(0.26)</i>
@ 1800°F (982°C)	1.95 <i>(0.28)</i>	2.28 (0.33)	1.95 <i>(0.28)</i>	2.28 (0.33)

\*\* 2" thick, 48"wide only

The values given herein are typical average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Therefore, the data contained herein should not be used for specification purposes. Check with your Thermal Ceramics office to obtain current information.

Marketing Communications Offices Thermal Ceramics Americas
T: (706) 796 4200
F: (706) 796 4398
Thermal Ceramics Asia Pacific
T: +65 6733 6068
F: +65 6733 8068
Thermal Ceramics Europe
T: +44 (0) 151 334 4030
F: +44 (0) 151 334 1684

North America - Sales Offices Canada T: +1 (905) 335 3414 F: +1 (905) 335 5145 Mexico T: +52 (555) 576 6622 F: +52 (555) 576 3060 United States of America Eastern Region T: +1 (800) 338 9284 F: +1 (866) 785 2764 This product may be covered by one or more of the following patents or foreign equivalents: US5332699, US5714421, US5811360, US5821183, US5928975, US5955389, US5994247, US6180546, EP0906250, GB2348640. A list of foreign patent numbers is available upon request to The Morgan Crucible Company plc. Thermal Ceramics, Superwool, 607 and MAX are trademarks of The Morgan Crucible Company plc.

Western Region T: +1 (866) 785 2738 F: +1 (866) 785 2760

South America - Sales Offices Argentina T: +54 (11) 4373 4439 F: +54 (11) 4372 3331 Brazil T: +55 (21) 2418 1366 F: +55 (21) 2418 1205 Chile
T: +56 (2) 854 1064
F: +56 (2) 854 1952
Colombia
T: +57 (2) 2282935/2282803/2282799
F: +57 (2) 2282935/2282803/23722085
Guatemala
T: +50 (2) 4733 295/6
F: +50 (2) 4730 601
Venezuela
T: +58 (241) 878 3164
F: +58 (241) 878 6712