

Data Sheet

ArmorWool™ AES Blanket

a product of ArmorMax Engineered Systems

Introduction

ArmorWool AES Blanket is manufactured from Alkaline Earth Silicate (AES), using Ultra Low Shot (ULS) technology, achieving improved thermal conductivity and mechanical strength, as a result of the high fiber index. This technology provides the highest possible thermal insulation value, higher strength, greater resiliency after compression, and better handling strength. ArmorWool AES is a low biopersistence product and requires no warning label.

ArmorWool AES is available in a wide range of dimensions and densities from 4 PCF to 8 PCF. Higher density products are available upon request. It has been developed to meet requirements specific to the final application.

Type

ArmorWool AES Blanket is manufactured from AES high temperature fibers.

Temperature range

Blanket	Classification Temperature	Maximum Continuous Use Limit*
ArmorWool AES	2200°F	1950°F

*The maximum continuous use temperature provided on the data sheet is a guideline and only applicable in a clean oxidizing atmosphere.

Typical applications

- Thermal insulation for furnace lining
- Thermal insulation for lining stacks and chimneys
- Thermal protection cover in aluminum industry
- HRSG thermal liner for boilers and ducting
- Exhaust heat shields for automotive applications
- Thermal insulation of furnaces and industrial applications.

Benefits

- Low shot technology
- Excellent insulation performance
- High handling strength
- Low heat storage
- Excellent thermal stability
- Greater sustainability
- Higher energy saving
- Lower heat loss
- Better furnace temperature control
- Exonerated of carcinogenic label requirement

Additional products

Other ArmorWool Blanket products include Standard Grade ArmorWool X, ArmorWool HP, and ArmorWool ZR, as well as Special Grade ArmorWool HA, ArmorWool CR and ArmorWool PCW.



Properties measured	Typical Values		
	Standard	Unit	ArmorWool AES
Grade			AES
Color			white
Classification temperature		°F	2200
Continuous use temperature		°F	1950
Density		PCF	6 8
Tensile strength	GB/T 17911	PSI	8 11
Permanent linear shrinkage	GB/T 17911	% @2200°F	< 3
Thermal conductivity	ASTM C201	BTU-in/hr-ft ² ·°F @ 500°F @ 1000°F @ 1500°F @ 1800°F	0.45 0.80 1.42 1.86 0.42 0.69w 1.25 1.60
Chemical composition, %	GB/T 21114	SiO ₂ CaO MgO Other	63-66 26-33 3-7 < 0.8

Availability

ArmorWool AES Blanket is supplied in standard shrinkwrap plastic film, but also can be supplied in cartons. The blankets are placed on a heat-treated export pallet with 24 rolls per pallet. Other sizes are available on request.

Length (In)	Width (In)	Thickness (In)	Sq Ft per roll
600	24	1/2	100
300	24	1	50
200	24	1-1/2	33.33
150	24	2	25

Product range

ArmorWool AES Blanket is a part of an extensive product range of high temperature insulation products provided to meet industry demands for a distributor focused on value, responsiveness and high-quality refractory insulation and specialty products to heat-processing industries.

Technical support

ArmorMax Engineered Systems, Inc. provides help with material selections for applications, engineering services and installation, as well as compliance with applicable regulations and performance standards. For additional information, please contact the team at ArmorMax Engineered Systems, Inc.

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