

## Data Sheet

# ArmorWool™ AES Boards

a product of ArmorMax Engineered Systems

### Introduction

ArmorWool LB2200 and ArmorWool LB2400 Boards are manufactured from Alkaline Earth Silicate (AES) bulk fiber, using Ultra Low Shot (ULS) technology for overall better results for applications in refractory linings or condensing boilers. They are a low biopersistence product and require no warning label.

With a continuous production process including state-of-the-art drying techniques, these boards are manufactured as uniform, lightweight, low shot and stable board to a thickness of up to 4 inches for high consistency, quality, and performance.

### ArmorWool LB2200

ArmorWool LB2200 Board is a general purpose, high temperature board manufactured with AES fiber (from exonerated ArmorWool ULS bulk fiber) and carefully selected fillers to deliver high strength and performance in refractory linings, as well as commercial boilers.

### ArmorWool LB2400

ArmorWool LB2400 is a unique 2400°F-rated AES fiber board. The high stability and minimum shrinkage allows continuous use up to 2100°F.

### Type

ArmorWool AES Boards are manufactured from high temperature AES bulk fibers and selected fillers.

### Temperature range

Boards	Classification Temperature	Maximum Continuous Use Limit*
ArmorWool LB2200	2200°F	1950°F
ArmorWool LB2400	2400°F	2100°F

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

### Typical applications

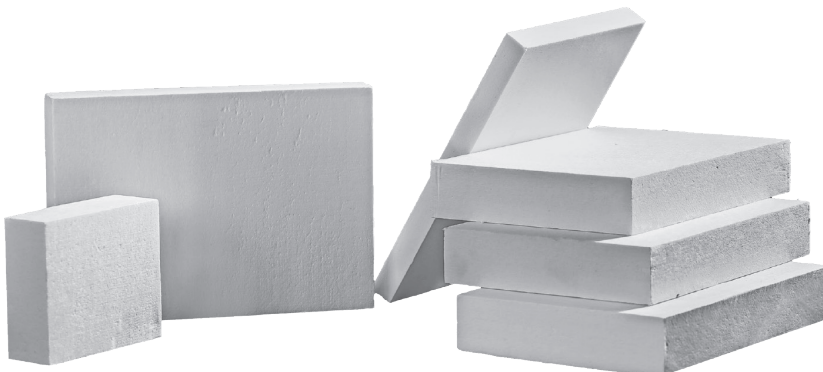
- High temperature back-up insulation
- Lining combustion chambers for commercial boilers and heaters
- Industrial furnaces and technical applications

### Benefits

- High fiber index
- Low shot technology
- Excellent insulation performance
- Good structural strength
- Resistant to erosion from high gas velocities
- Can be used in direct flame contact
- Low shrinkage
- Excellent thermal stability
- Resistant to thermal shock
- Exonerated of carcinogenic classification under Note Q

### Additional products

Other ArmorWool Board products include Standard Grade ArmorWool X, ArmorWool HP, and ArmorWool ZR, and Special Grade ArmorWool HT and ArmorWool 2900.



Properties measured			Typical Values	
	Standard	Unit	ArmorWool LB2200	ArmorWool LB2400
Grade			AES	AES
Color			White	White
Classification temperature		°F	2200	2400
Continuous use temperature		°F	1950	2100
Density		PCF	18.5	18.5
Loss on ignition	GB/T 6900	wgt%	< 8	< 8
Modulus of Rupture Unfired	EN 993-6	PSI	≥ 80	≥ 80
Compressive strength @ 5% deformation @ 10% deformation	EN ISO8895	PSI	≥ 20	≥ 20
		PSI	≥ 25	≥ 25
Permanent linear shrinkage	EN 1094-7	% @2100°F @2200°F	<2	<2
Thermal conductivity	ASTM C201	BTU-in/hr-ft <sup>2</sup> ·°F @ 500°F @ 1000°F @ 1500°F @ 1800°F @ 2000°F	0.45 0.66 1.05 1.28 1.47	0.45 0.66 1.05 1.33 1.56

### Availability

ArmorWool Boards are available in the standard 47.25 x 36 inches, supplied in cartons approximately 5 inches high (based on board thickness). Other sizes are available on request.

Dimension 47.25 x 36 inches		
Thickness (In)	Per carton	Boards per pallet
3/8	12	192
1/2	10	160
3/4	8	128
1	5	80
1 1/2	4	56
2	3	36
3	2	24
4	2	16

### Product range

ArmorWool AES Boards are 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.

### Contact

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