Data Sheet

ArmorWool™ Special Grade Boards

a product of ArmorMax Engineered Systems

Introduction

ArmorWool Special Grade Boards are designed for high strength or extreme durability for the most demanding applications and manufactured from Polycrystalline Wool (PCW) and Refractory Ceramic fiber (RCF) wool and selected fibers.

The continuous production process uses state-of-the-art drying techniques, allowing for a uniform, lightweight, low shot and stable board to a thickness of 2 inches at high consistency, quality, and performance.

ArmorWool HT

ArmorWool HT Board is a blend of low shot, high temperature RCF and high performance alumina fibers (PCW). It has excellent dimensional stability, minimum shrinkage, and a classification temperature of 2700°F.

ArmorWool 2900

ArmorWool 2900 is manufactured from a blend of low shot, Armorwool HA fiber and high performance alumina fibers (PCW). The result is a board which can be used in a continous temperature of 2700°F at virtually no shrinkage. The use of inorganic binders minimizes loss of strength and fumes at first firing.

Type

ArmorWool Special Grade Boards are manufactured from high temperature PCW and RCF bulk fibers and selected fillers.

Temperature range

Board	Classification Temperature	Maximum Continuous Use Limit*
ArmorWool HT	2700°F	-
ArmorWool 2900	2900°F	2700°F

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

Typical applications

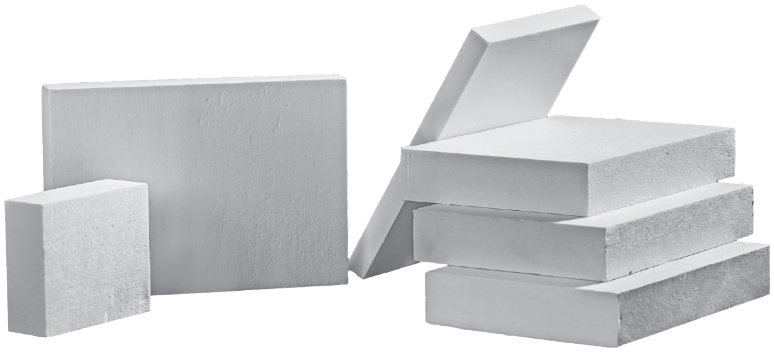
- Chemical resistant lining in furnaces operating in reducing atmospheres
- Lining combustion chamber for gas fired boilers and heaters
- Thermal insulation of furnaces and industrial applications

Benefits

- Low shot technology
- Excellent insulation performance
- High handling strength
- Resistant to erosion from high gas velocities
- Can be used in direct flame contact
- Low shrinkage
- Excellent thermal stability
- Resistant to thermal shock

Additional products

Other ArmorWool Board products include Standard Grade ArmorWool X, ArmorWool HP, ArmorWool ZR, and AES ArmorWool LB2200 and ArmorWool LB2400.



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ArmorWool™

Properties measured			Typical Values	
	Standard	Unit	ArmorWool HT	ArmorWool 2900
Grade			PCW/RCF	PCW/RCF
Color			White	White
Classification temperature		°F	2700	2900
Continuous use temperature		°F	-	2700
Density		PCF	18.5- 20	28
Loss on ignition	GB/T 6900	wgt%	-	< 3
Compressive strength **@ 5% deformation** **@ 10% deformation**	EN ISO8895	 PSI PSI	 ≥ 15 ≥ 20	 > 30 > 40
Permanent linear shrinkage	EN 1094-7	% @2800°F	 -	 <1
Thermal conductivity	ASTM C201	BTU·in/hr·ft²·°F @ 500°F @ 1000°F @ 1500°F @ 1800°F @ 2000°F @ 2200°F	 0.49 0.73 1.11 1.37 1.56	 0.38 0.62 1.00 1.23 1.52 1.75
Chemical composition (after firing)	GB/T 21114	% Al_2O_3 SiO_2 ZrO_2 Other	 60-62 37-40 - < 1	 60-62 37-40 - < 1

Availability

Dimension	39.37 x 23.62 inches	
Thickness (In)	Per carton	Boards per pallet
1/2	18	216
3/4	12	144
1	10	120
2	6	72

Product range

ArmorWool Special Grade Boards are 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.

Contact

ArmorMax Engineered Systems, Inc.
202 East Cherry Street
New Castle, PA 16102

p (724) 654-8490 **f** (724) 656-1759
e info@armormaxinc.com

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