



# HEATSHIELD PRODUCTS, INC.

HEAT PROTECTION YOU CAN COUNT ON

Revision 05/14

## SPECIFICATION SHEET

## PRODUCT NAME: HEADER ARMOR

### SECTION 1: APPLICATIONS

Applications: Exhaust headers, exhaust manifold, turbo manifolds. Due to its high quality construction and high temperature capabilities, it may also be used for: 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

### SECTION 2: FEATURES AND BENEFITS

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

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

#### Type

Alkaline Earth Silicate (AES)

#### 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

### SECTION 3: TECHNICAL DATA

#### Physical Properties

Color	White and aluminum
Classification Temperature Rating,	2012F(1100C)
Density, pcf (kg/m <sup>3</sup> )	4, 6, 8, 10 (64, 96, 128, 160)

#### Chemical Analysis, %

Silica, SiO <sub>2</sub>	60-70
Calcium Oxide, CaO	25 - 35
Magnesium Oxide, MgO	4 - 7
Other	trace



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**Thermal Conductivity**, Btu\*in/hr\*ft<sup>2</sup>-°F (w/m\*k) (ASTM 201), measured at 8 pcf (128 kg/m<sup>3</sup>)

Mean temperature

@ 500°F (260°C)	0.42 (0.06)
@ 1000°F (538°C)	0.88 (0.13)
@ 1500°F (816°C)	1.53 (0.22)
@ 1832°F (1000°C)	2.00 (0.29)

**HEATSHIELD PRODUCTS  
AUTHORIZED DISTRIBUTOR:**



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