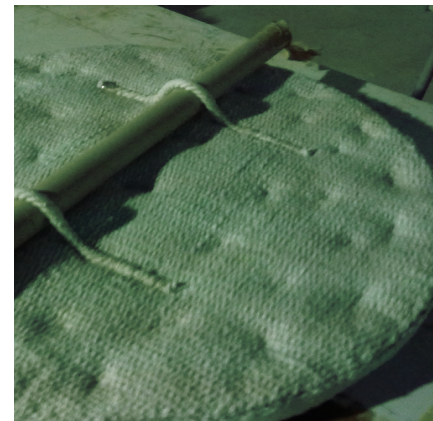
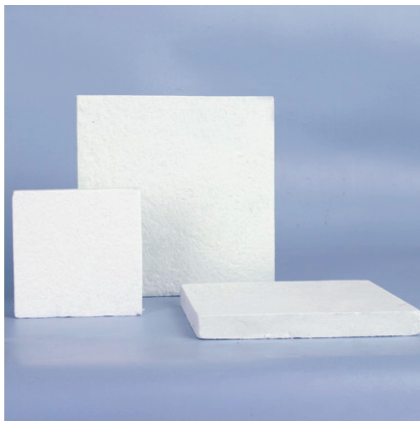




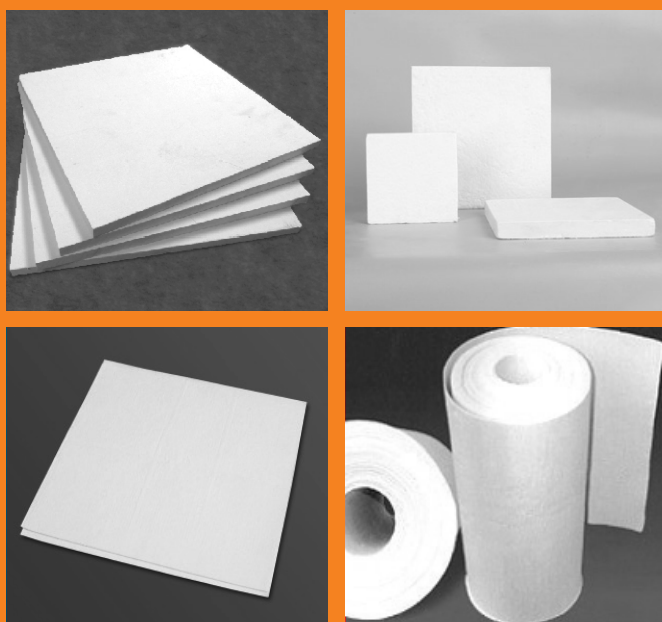
### LOW THERMAL MASS INSULATION RANGE FOR ENERGY CONSERVATION

- CERAMIC FIBRE BOARDS
- CERAMIC FIBRE PAPER
- CERAMIC FIBRE SHAPES
- CERAMIC FIBRE ROPE
- INSULATING BOARDS
- INSULATING PANELS
- ASBESTOS FREE MILL BOARDS
- INSULATING BRICKS



## AGNI CERAMIC FIBRE PAPERS

Ceramic Fiber Paper is manufactured from alumina-silica fibers in a vacuum forming process with a latex binder system. In the manufacturing process, high purity washed fibers—which have been cleansed of most unfiberized particles are randomly oriented to form a uniform, flexible, lightweight paper.



PHYSICAL PROPERTIES	STD PAPER	AZS PAPER
Classification Temperature °C	1260 °C	1425 °C
Chemical composition (%)		
Al <sub>2</sub> O <sub>3</sub>	> 40	> 30
SiO <sub>2</sub>	< 56	< 53
ZrO <sub>2</sub>	---	< 17.5
Loss on ignition %	< 10	< 10
Density (Nominal) kg/m <sup>3</sup>	200	200
Tensile strength (Kgf/m <sup>2</sup> )	6000	6000
Linear shrinkage % - 24 hrs (Max)	2.0 (At 1100°C)	2.0 (At 1200°C)

*Availability & Packaging :*

*1000 mm Width x 1000 mm Length, 500 mm Width x 1000 mm Length*

### Advantages

- High Flexibility
- High temperature resistance and stability
- Low thermal conductivity
- Low heat storage
- Good dielectric strength
- Thermal shock stability
- Low density
- Good resiliency and excellent acoustical absorption properties.

Ceramic fiber paper is also easy to cut and install.

### Applications

- Industrial furnaces, steel ladles, casting barrels and submerged nozzles
- Heat shielding
- Electric and thermal insulation for electric furnaces
- Sealing for furnace doors and expansion joints
- Lining for aluminium casting moulds
- Burner gaskets
- Thermal and electric insulation for heaters
- Acoustic and thermal insulation for automobile mufflers
- Heat insulation for exhaust tubes and pipes
- Refractory back-up

New Range - Sharadaa Classic

## AGNI CERAMIC FIBRE BOARDS & SHAPES

Ceramic Fiber Boards and Shapes are light-weight, low-density rigid self-supporting insulation.

Boards and Shapes manufactured from Ceramic Fibers with both organic and inorganic binders and fillers, in vacuum forming process to improve handling strength and ensure board integrity at high service temperatures (Organic Binders burn out between temperatures of 450° and 600°). It provide excellent high temperature stability, low-thermal conductivity, good compressive strength.

### Applications

- Backup insulation for Castables, Bricks, IFB and other Refractory
- Hot face lining
- Gaskets and Seals
- High temperature baffles and muffles
- Flue and Duct linings
- Launder and Trough linings for non-ferrous molten metals
- Launder covers over molten metals and molten salt
- Parting materials to provide protection against molten metal splash
- Boiler and water heater linings for combustion areas
- Ceramic Kiln and Industrial Furnace Linings

### Advantages

- Low thermal conductivity and low shrinkage
- Low heat storage
- Stability at high temperatures
- Excellent resistance to thermal shock
- Reduced refractory heat-up and cool-down time
- Light-weight for ease of handling, cutting, drilling, sawing and machining
- Excellent acoustic insulation and long life
- Smooth surface
- Asbestos free

### Properties and Characteristics

Description	Boards / Shapes	Insulation Boards
Classification Temperature (°C)	1260°C	1200 °C
Grade	Normal Board	Normal Board
Thickness (mm)	10 to 100 mm	25 to 75 mm
Dimensions Tolerance		
Thick, Length & Width	+3, -2 mm	+3, -2 mm
Density (Nominal ) Kg/m <sup>3</sup>	260	350
Modulus of Rupture (KPa)		
up to 25 mm Thick	500	300
Modulus of Rupture (KPa)		
Above 25 mm Thick	200	150
Linear Shrinkage % - 24 hrs (Max)	4.0	5.0
Thermal Conductivity (w/mk)		
600°C (Mean temperature)	0.11	0.15
Loss of Ignition (%)	< 10	<10
Chemical Analysis		
Al <sub>2</sub> O <sub>3</sub> (%)	>40	>25
SiO <sub>2</sub> (%)	<60	<75

Available Standard Size :  
500 mm Width x 1000 mm Length, 1000 mm Width x 1000 mm Length



## AGNI CERAMIC FIBRE TEXTILES

Ceramic Fibre Textile product family is a unique group of high temperature ceramic fiber. These are useable in a wide variety of industrial applications.

Textiles are made from Alumina-silica ceramic fibers. It is reinforced with Fibre glass yarn or stainless steel. It is composed of four basic product lines: Rope, cloth, tape and sleeve. Textiles have excellent resistance to thermal shock, corrosive attack and breakdown due to mechanical vibration and stress. They also exhibit excellent chemical stability, resisting attack from most corrosive agents Exceptions are hydrofluoric and phosphoric acids and concentrated alkalis. Textiles also resist oxidation and reduction. If wet by water or steam, thermal and physical properties are completely restored upon drying. No water of hydration is present.

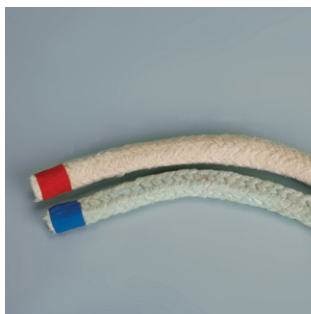
Ceramic Fiber contains approximately 18% organic fiber, burns out in use at approximately 250° C without affecting the yarn's integrity. But has no effect on the properties of the products.

### Features :

- Made from alumina-silica ceramic fiber.
- Asbestos free.
- High temperature use up to 2000°F.
- Excellent chemical stability.
- Excellent thermal shock and corrosion resistance.

### Applications

- Gaskets
- Seals
- Furnace and welding curtains
- Pipe wrapping
- Expansion joint
- Packaging for furnace
- Coke oven door seal insulation
- Crucible lid seals
- Hot top seal
- Gasket for vacuum degassing of steel during pouring
- Fireproof wrap and insulation
- Radiant tube packing for heat-treat furnace
- Seals for stoves and ovens
- Tadpole gaskets



High Density Rope



Ceramic Fibre Cloth

TYPE	STD
Classification Temp	1260°C (2300)°F
Service Temp	≤1000°C
Melting	1740°C
<b>Chemical Composition (%)</b>	
Al <sub>2</sub> O <sub>3</sub>	40%
SiO <sub>2</sub>	56%
Diameter of Ceramic Fiber	3-4 micron
Loss on ignition	Max 20%