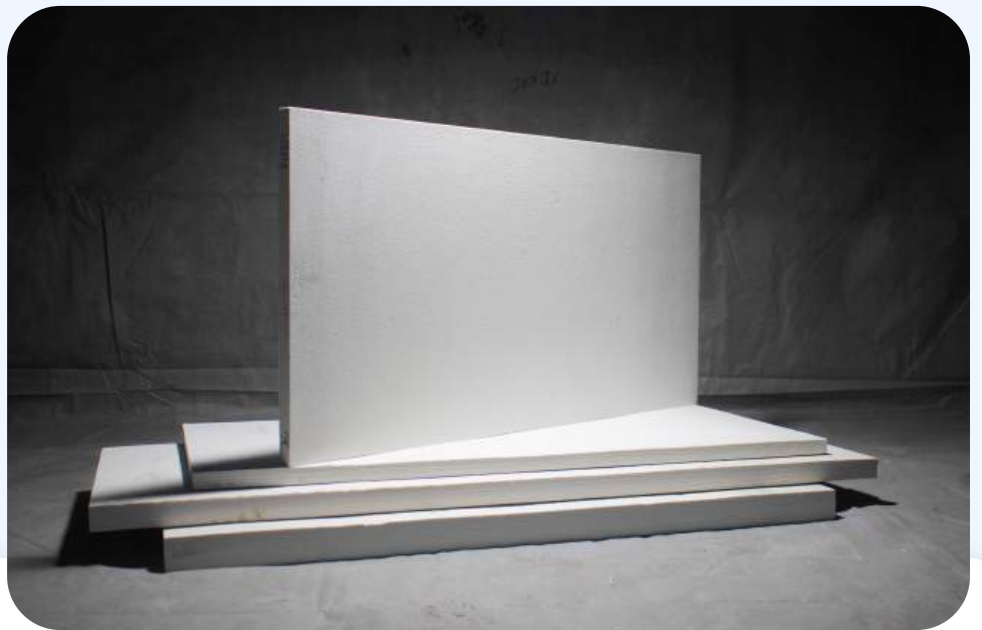


## Product Overview :

Ceramic fiber boards are high-density, rigid insulation materials designed for use in high-temperature environments. These boards are composed of high-purity alumina-silicate fibers. They are engineered to deliver outstanding thermal insulation, mechanical strength, and resistance to thermal shock and chemical erosion. Ideal for applications such as furnace linings, kiln insulation, and high-temperature gaskets, ceramic fiber boards maintain structural integrity even under extreme conditions, making them a reliable choice for demanding industrial applications.



## Key Points :

**High Thermal Resistance:** Capable of withstanding continuous exposure to temperatures up to 1425°C (2,597°F), providing effective insulation in extreme heat.

**Durable and Rigid:** Offers superior mechanical strength, making it suitable for environments with high vibrations, erosive forces, and mechanical stress.

**Low Thermal Conductivity:** Ensures minimal heat transfer, optimizing energy efficiency in high-temperature processes.

**Chemical and Erosion Resistance:** Excellent resistance to most chemicals, protecting the insulation in harsh industrial settings.

**Versatile Applications:** Adaptable to a wide range of high-temperature applications, from furnace linings to electrical insulation.

## Applications:

**Furnace and Kiln Linings:** Provides a stable and durable lining material that withstands high temperatures and mechanical stress.

**Thermal Barriers:** Acts as an effective thermal barrier in various high-temperature industrial processes, minimizing heat loss.

**High-Temperature Gaskets and Seals:** Used in manufacturing gaskets for high-temperature applications, ensuring efficient thermal sealing.

**Chemical Processing:** Ideal for environments exposed to corrosive chemicals, offering robust protection and insulation.



## Advantages:

**High Mechanical Strength:** Engineered to withstand mechanical stress, vibrations, and erosive forces, these boards maintain their structural integrity in demanding environments.

**Chemical Stability:** Excellent resistance to chemical corrosion, making them ideal for use in harsh environments where exposure to corrosive substances is common.

## Hydrophobic Board :

**Moisture Resistance :** The hydrophobic nature of these boards prevents water absorption, maintaining insulation efficiency even in humid environments.

**Versatility :** Suitable for a variety of industries, including metallurgy, shipbuilding, chemical processing, and environmental protection, these boards offer a reliable solution for complex insulation challenges.

## TECHNICAL SPECIFICATIONS :

| <i>Chemical Analysis</i>                             | <i>1100°C</i> | <i>1260°C</i> |
|------------------------------------------------------|---------------|---------------|
| Al <sub>2</sub> O <sub>3</sub> (%)                   | 22 - 24       | 38 - 42       |
| SiO <sub>2</sub> (%)                                 | 71 - 73       | 58 - 62       |
| ZrO <sub>2</sub> (%)                                 | -             | -             |
| Fe <sub>2</sub> O <sub>3</sub> +TiO <sub>2</sub> (%) | < 1           | < 1           |
| Other                                                | < 1           | < 1           |
| Loss On Ignition (Wt. %)                             | 3 - 6         | 3 - 6         |
| <i>Physical Properties</i>                           |               |               |
| Color                                                | Off White     | White         |
| Classification Temperature (°C)                      | 1100          | 1260          |
| Density (kg/m <sup>3</sup> )                         | 280 - 350     | 320 - 380     |
| Hardness Shore Scale                                 | 35 - 40       | 40            |
| Flexural Strength (kg/cm <sup>2</sup> )<br>(Spec.)   |               |               |
| 25 mm                                                | 5 min         | 7 min         |
| Compressive Strength (kg/cm <sup>2</sup> )           |               |               |
| Thickness (Spec.)                                    | 25 mm         | 25 mm         |
| 10% Deformation                                      | 2.3           | 2.8           |
| 25% Deformation                                      | 5             | 5.5           |

The above strengths are for thickness upto 25mm, for higher thickness the strength will be lower.

| <i>Thermal Conductivity , ASTM C-177 (W/MK)</i> |      |      |
|-------------------------------------------------|------|------|
| 250°C                                           | 0.10 | 0.10 |
| 550°C                                           | 0.11 | 0.11 |
| 850°C                                           | 0.13 | 0.14 |
| 1000°C                                          | -    | 0.19 |

Thermal Conductivity figures are empirical values (average) based on experience.

| <i>Linear Shrinkage (%) For 24 Hrs</i> |     |     |
|----------------------------------------|-----|-----|
| 1000°C                                 | 1   | -   |
| 1100°C                                 | 1.5 | 1   |
| 1200°C                                 | -   | 2.5 |
| 1300°C                                 | -   | -   |
| 1400°C                                 | -   | -   |

For Specification Add 0.5% To Above Shrinkage Value.

Water Repellant (Hydrophobic Board) Boards Are Available In ALL Grade.

Classification temperature refers to the maximum short term temperature limit. The maximum continuous use limit depends upon application conditions. For certain applications continuous use temperature limits may be significantly reduced. For assistance or clarification please contact us at email or office.

## TECHNICAL SPECIFICATIONS :

| <b>Chemical Analysis</b>                             | <b>1425°C</b> | <b>HD (1260°C)</b> |
|------------------------------------------------------|---------------|--------------------|
| Al <sub>2</sub> O <sub>3</sub> (%)                   | 29 - 33       | 38 - 42            |
| SiO <sub>2</sub> (%)                                 | 51 - 56       | 58 - 62            |
| ZrO <sub>2</sub> (%)                                 | 12 - 14       | -                  |
| Fe <sub>2</sub> O <sub>3</sub> +TiO <sub>2</sub> (%) | < 1           | < 1                |
| Other                                                | < 1           | < 1                |
| Loss On Ignition (Wt. %)                             | 3 - 6         | 3 - 6              |
| <b>Physical Properties</b>                           |               |                    |
| Color                                                | White         | White              |
| Classification Temperature (°C)                      | 1425          | 1260               |
| Density (kg/m <sup>3</sup> )                         | 320 - 380     | 416 - 480          |
| Hardness Shore Scale                                 | 40            | 50                 |
| Flexural Strength (kg/cm <sup>2</sup> )<br>(Spec.)   |               |                    |
| 25mm                                                 | 7 min         | 14 min             |
| Compressive Strength (kg/cm <sup>2</sup> )           |               |                    |
| Thickness (Spec.)                                    | 25 mm         | 25 mm              |
| 10% Deformation                                      | 2.8           | 5                  |
| 25% Deformation                                      | 5.5           | 10.5               |

Other density (500-650 kg/m<sup>3</sup>) on HD grade may be available on request subject to minimum order requirement.  
The above strengths are for thickness upto 25mm, for higher thickness the strength will be lower.

| <b>Thermal Conductivity , ASTM C-177 (W/MK)</b> |      |      |
|-------------------------------------------------|------|------|
| 250°C                                           |      |      |
| 550°C                                           | 0.10 | 0.11 |
| 850°C                                           | 0.11 | 0.12 |
| 1000°C                                          | 0.14 | 0.15 |
|                                                 | 0.19 | 0.20 |

Thermal Conductivity figures are empirical values (average) based on experience.

| <b>Linear Shrinkage (%) For 24 Hrs</b> |     |     |
|----------------------------------------|-----|-----|
| 1000°C                                 | -   | -   |
| 1100°C                                 | -   | 1   |
| 1200°C                                 | 2   | 2.5 |
| 1300°C                                 | 2.5 | -   |
| 1400°C                                 | 3   | -   |

For Specification Add 0.5% To Above Shrinkage Value.

Water Repellant (Hydrophobic Board) Boards Are Available In ALL Grade.

Classification temperature refers to the maximum short term temperature limit. The maximum continuous use limit depends upon application conditions. For certain applications continuous use temperature limits may be significantly reduced. For assistance or clarification please contact us at email or office.

## TECHNICAL SPECIFICATIONS :

| <i>Chemical Analysis</i>                             | <i>HS 1260°C</i> | <i>HS Plus (1260°C)</i> |
|------------------------------------------------------|------------------|-------------------------|
| Al <sub>2</sub> O <sub>3</sub> (%)                   | 48 - 52          | 50 - 54                 |
| SiO <sub>2</sub> (%)                                 | 40 - 44          | 37 - 41                 |
| CaO (%)                                              | -                | < 10                    |
| Fe <sub>2</sub> O <sub>3</sub> +TiO <sub>2</sub> (%) | < 1              | < 1                     |
| Other                                                | < 1              | < 8                     |
| Loss On Ignition (Wt. %)                             | 7 - 10           | < 10.5                  |

| <i>Physical Properties</i>                                                         |             |             |
|------------------------------------------------------------------------------------|-------------|-------------|
| Classification Temperature (°C)                                                    | 1260        | 1260        |
| Density (kg/m <sup>3</sup> )                                                       | > 720       | > 800       |
| Hardness Shore Scale                                                               | 75          | 80          |
| Flexural Strength (kg/cm <sup>2</sup> )<br>(Spec.)<br>50 mm                        | 33 min      | 55 min      |
| Compressive Strength (kg/cm <sup>2</sup> )<br>Thickness (Spec.)<br>10% Deformation | 25 mm<br>20 | 25 mm<br>27 |

The above strengths are for thickness upto 25mm, for higher thickness the strength will be lower.

| <i>Thermal Conductivity , ASTM C-177 (W/MK)</i> |      |      |
|-------------------------------------------------|------|------|
| 250°C                                           | 0.12 | -    |
| 550°C                                           | 0.14 | 0.15 |
| 850°C                                           | 0.17 | -    |
| 1000°C                                          | 0.22 | -    |

Thermal Conductivity figures are empirical values (average) based on experience.

| <i>Linear Shrinkage (%) For 24 Hrs</i> |     |     |
|----------------------------------------|-----|-----|
| 1200°C                                 | 0.5 | 0.5 |

For Specification Add 0.5% To Above Shrinkage Value.

Water Repellant (Hydrophobic Board) Boards Are Available In ALL Grade.

Classification temperature refers to the maximum short term temperature limit. The maximum continuous use limit depends upon application conditions. For certain applications continuous use temperature limits may be significantly reduced. For assistance or clarification please contact us at email or office.

AVAILABILITY :

| Thickness (mm)                                                                                 | Pieces per Carton |
|------------------------------------------------------------------------------------------------|-------------------|
| Size (l x w mm) : 1000 x 500 / 1000 x 600 /<br>1200 x 600 / 1200 x 500 / 900 x 600 / 900 x 500 |                   |
| 10                                                                                             | 13                |
| 12                                                                                             | 12                |
| 20                                                                                             | 7                 |
| 25                                                                                             | 6                 |
| 35                                                                                             | 4                 |
| 50                                                                                             | 3                 |
| 75                                                                                             | 2                 |
| 100                                                                                            | 1                 |

Other thicknesses / sizes may be available on request subject to minimum order requirement.

HANDLING INFORMATION

A Material Safety Data Sheet Has Been Issued Describing The Health, Safety And Environmental Properties Of This Product, Identifying The Potential Hazards And Giving Advice On Handling Precautions And Emergency Procedures. This Must Be Consulted And Fully Understood Before Handling, Storage Or Use.

Supplied by :

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