

## Industrial-Grade High Quality High-Durability Alkali-Resistant Refractory Bricks For Enhanced Furnace Protection

Our Product Introduction

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### Basic Information

- Place of Origin: Zhengzhou, China
- Brand Name: Rongsheng Xinwei
- Certification: ISO9001
- Model Number: Ordinary Type, High-strength type, Insulation type, Vault type
- Minimum Order Quantity: 1 Ton
- Price: 200-800 USD
- Packaging Details: Packed on wooden pallets, with water-proof cover, and tightened with plastic/steel bandages
- Delivery Time: 20-30Days
- Payment Terms: TT; L/C
- Supply Ability: 2000 tons/month



### Product Specification

- Packing: Wooden Pallet, Carton, Etc.
- Cold Crushing Strength:  $\geq 60\text{MPa}$
- $\text{Al}_2\text{O}_3$  Content:  $\geq 42\%$
- Acid Resistance:  $\geq 95\%$
- True Density:  $\leq 2.33\text{ G/cm}^3$
- Softening Point: High
- Porosity: Low
- Reduced Downtime: Yes
- Temperature Resistance: Up To  $1700^\circ\text{C}$
- Use Zone: Transition Zone
- Extended Kiln Life: Yes
- Thermal Shock Resistance: Excellent
- Compressive Strength:  $\geq 25\text{MPa}$
- Heat Capacity: High
- Thermal Expansion: High, Medium, Low



### More Images



### Product Description

#### Product Description of Industrial-Grade High Quality High-Durability Alkali-Resistant Refractory Bricks For Enhanced Furnace Protection

Alkali-resistant bricks are a type of refractory brick that is specifically designed to resist the corrosive effects of alkalis, such as sodium and potassium oxides. These alkalis are found in a variety of industrial applications, including cement kilns, power plants, and chemical processing plants. ARB are typically made from a combination of low-alumina refractory clay and silica sand. They have a high silica content, which makes them resistant to attack by alkalis. ARB are also characterized by their low thermal expansion coefficient, which means that they can withstand rapid changes in temperature without cracking or spalling.

#### Product Features of High Quality High-Durability Alkali-Resistant Refractory Bricks

Alkali-resistant bricks are specialized refractory materials with key features including:

- High Alkali Resistance: Withstands chemical attack from alkali substances.
- High Temperature Strength: Maintains structural integrity at elevated temperatures.
- Thermal Stability: Resists thermal shock and rapid temperature changes.

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**Chemical Stability:** Remains stable in harsh chemical environments, especially those involving alkali.



#### Applications of Alkali-Resistant Refractory Bricks For Enhanced Furnace Protection

**Alkali-resistant Bricks** are used in a wide variety of applications where they are exposed to alkalis. Some of the most common applications include:

**Cement kilns:** Alkali-resistant Bricks are used in the lining of cement kilns to protect them from the corrosive effects of the high-alkali clinker that is produced during the cement manufacturing process.

**Power plants:** Alkali-resistant Bricks are used in the lining of boilers and other components of power plants to protect them from the corrosive effects of the flue gas.

**Chemical processing plants:** Alkali-resistant Bricks are used in the lining of reactors, tanks, and other vessels that are used to store and process chemicals.

#### Product Specification of High Quality High-Durability Low Price Alkali-resistant Bricks

Items	Ordinary Type	High-strength type	Insulation type
Al <sub>2</sub> O <sub>3</sub> %	25-30	25-30	25-30
Fe <sub>2</sub> O <sub>3</sub> %	2	2	2
SiO <sub>2</sub> %	65-70	65-70	60-70
Refractoriness (°C)	1650	1650	1650
Bulk Density g/cm <sup>3</sup> ≥	2.15	2.25	1.65
Apparent Porosity % ≤	21	20	35
Cold Crushing Strength MPa ≥	35	60	15
Refractoriness Under Load °C ≥	1350	1300	1250
thermal conductivity W/m. (350°C±10°C) TC	1.28	1.28	0.7
Application	Large and medium dry-process kiln, decomposing furnace, etc.		

#### Benefits of using Alkali-resistant Bricks

There are several benefits to using alkali-resistant bricks, including:

**Extended service life:** Alkali-resistant Bricks are highly resistant to alkali attack, which means that they can last for many years in even the most demanding applications.

**Reduced maintenance costs:** Because Alkali-resistant Bricks are so durable, they require less maintenance than other types of bricks. This can save money on both labor and materials.

**Improved safety:** Alkali-resistant Bricks are less likely to crack or spall than other types of bricks, which can help to improve safety in industrial settings.

#### Types of Alkali-resistant Bricks

There are several different types of alkali-resistant bricks available, each with its own unique properties. Some of the most common types of Alkali-resistant Bricks include:

**Low-alumina Alkali-resistant Bricks:** These are the most common type of Alkali-resistant Bricks and are typically used in applications where the alkali content is moderate.

**High-alumina Alkali-resistant Bricks:** These Alkali-resistant Bricks have a higher alumina content than low-alumina ARB and are more resistant to alkali attack. They are typically used in applications where the alkali content is high.

**Super-duty Alkali-resistant Bricks:** These Alkali-resistant Bricks have the highest alumina content of all ARB and are the most resistant to alkali attack. They are typically used in the most demanding applications.

#### Selection of Alkali-resistant Bricks

The type of alkali-resistant brick that is best for a particular application will depend on a number of factors, including the alkali content of the environment, the operating temperature, and the desired service life. It is important to consult with a qualified refractory engineer to select the right type of Alkali-resistant Bricks for a specific application.

In addition to the information provided above, here are some additional details about alkali-resistant bricks:

Alkali-resistant Bricks are typically manufactured in a variety of shapes and sizes to meet the specific needs of different applications.

Alkali-resistant Bricks can be installed using a variety of methods, including mortar, mastics, and dry-laying techniques.

Alkali-resistant Bricks are an important part of many industrial applications and can help to extend the life of equipment and improve safety.