

DGC Refractories offers a range of high-performance silica and specialty bricks designed to meet the rigorous thermal, chemical, and mechanical challenges present in specific industrial sectors such as glass manufacturing, coke ovens, and flue gas environments. These bricks are selected for their unique material characteristics, enabling enhanced service life, structural reliability, and environmental resistance.

SILICA BRICK (SI-94)

The Silica Brick SI-94 is manufactured with over 94% SiO_2 content and is designed for high-temperature performance where dimensional stability is critical. It is widely used in the crown and breast walls of glass melting furnaces and in coke oven regenerators. The material exhibits a low coefficient of thermal expansion and excellent creep resistance under load, ensuring long-term structural integrity in static, high-heat environments.

SPECIAL ACID-RESISTANT BRICK (SIC-90)

The SiC-90 brick contains more than 90% silicon carbide, offering superior resistance to acidic gases, vapours, and slag corrosion. It is particularly suitable for flue gas linings, chimneys, sulphur recovery units, and other chemically aggressive environments. Its high thermal conductivity also helps dissipate heat efficiently, reducing the risk of thermal buildup and structural failure in thin-wall designs.

ALKALI-RESISTANT BRICK (AR-55)

Formulated with high-alumina raw materials and specific anti-alkaline additives, the AR-55 brick provides excellent resistance against alkali attack, particularly in cement kilns and biomass incinerators where alkali vapours are prevalent. It prevents glazing, surface peeling, and structural degradation, extending service life in zones where traditional bricks would fail prematurely.

SIC-MULLITE (ANDALUSITE) BRICK (SM-70A)

The SM-70A is a hybrid brick combining the wear resistance of silicon carbide with the thermal shock stability of andalusite and mullite. Its composite nature allows it to perform well in furnaces exposed to both mechanical abrasion and high thermal gradients. It is particularly valuable in the transitional and calcining zones of rotary kilns and in waste incinerators.

MULTILAYER MULLITE BRICK (MM-65)

This engineered brick features a layered structure designed to optimise thermal insulation and mechanical strength. The multi-layer design enhances resistance to spalling and thermal cycling, making it suitable for lining furnace roofs, regenerators, and preheater zones. The MM-65 balances energy efficiency with durability, reducing energy loss while maintaining a robust structural envelope.



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