

CCEFIRE® IFB26 Insulating Fire Brick



Temperature Grades: 2600°F (1430°C)

CCEFIRE® IFB26 Insulating Fire Brick is a high-temperature lightweight mullite-based insulating refractory brick designed for thermal insulation in medium- to high-temperature industrial furnaces. The brick is manufactured using high-purity refractory clay and selected alumina raw materials. Carefully graded organic pore-forming additives are

incorporated during production to create a uniform and controlled porous structure during high-temperature firing.

This engineered porous structure provides the brick with low thermal conductivity and improved thermal efficiency, allowing it to deliver reliable insulation performance in demanding industrial furnace environments.

IFB26 insulating fire brick features a higher alumina content and excellent refractoriness, enabling the material to maintain stable structural strength and dimensional stability under elevated temperatures. Compared with conventional dense refractory bricks, its low density and low heat storage capacity help reduce furnace heat loss, lower energy consumption, and shorten furnace heat-up and cool-down cycles, thereby improving the overall operating efficiency of industrial kilns and furnaces.

All six faces of the brick are precision machined to tight dimensional tolerances, facilitating easier installation and reducing the consumption of refractory mortar. This contributes to a more stable and uniform furnace lining structure.

CCEFIRE® IFB26 insulating fire bricks also support Fabrication and custom refractory component manufacturing. According to customer drawings, the bricks can be fabricated into specialized refractory components such as burner blocks, support bricks, door bricks, insulation structural parts, and various custom-shaped refractory components used in industrial furnace systems.

With excellent thermal stability, thermal shock resistance, and structural reliability, CCEFIRE® IFB26 insulating fire brick is widely used in medium- to high-temperature furnace systems across industries such as steel, petrochemical, non-ferrous metals, and ceramics.

Characteristics:

- Low thermal conductivity with excellent insulation performance;
- Low density and low heat storage, reducing energy consumption;
- High refractoriness, suitable for medium- to high-temperature furnace environments;
- Good thermal shock resistance and structural stability;
- Excellent spalling resistance, suitable for cyclic heating conditions;
- Accurate dimensions for easy installation;
- Fabrication capability for custom refractory components.

Application:

CCEFIRE® IFB26 Insulating Fire Brick is widely used in insulation structures and refractory lining systems for medium- to high-temperature industrial furnaces, including:

Metallurgical Industry

- Heat treatment furnaces
- Reheating furnaces
- Hot blast stoves
- Insulation structures for ladles and tundishes

Petrochemical Industry

- Cracking furnaces
- Tube-type heaters
- Reforming furnaces
- Process heater linings

Non-Ferrous Metal Industry

- Melting furnaces



Annealing furnaces

Reduction furnaces

Ceramics and Building Materials Industry

Tunnel kilns

Roller kilns

Pusher kilns

Other High-Temperature Equipment

Electric furnace linings

Furnace door bricks

Backup insulation layers for industrial furnace linings

TDS

CCEFIRE® IFB Insulating Fire brick								
Item	IFB-23C	IFB-23	IFB-24	IFB-26	IFB-28	IFB-30	IFB-32	
Classification Temp(°C)	1260	1260	1300	1430	1540	1650	1760	
Bulk Density(g/cm ³)	0.5	0.6	0.7	0.8	0.9	1	1.25	
Crushing Strength(MPa)	1.2	1.2	1.4	1.6	2.1	2.5	3.5	
Modulus of Rupture(MPa)	1	0.9	1.2	1.4	1.6	2.1	2.1	
Permanent linear change (CT-30°Cx24h)%	0.5	0.5	0.6	0.4	0.5	0.9	0.9	
Reversible thermal expansion at 1100°C	0.5	0.5	0.6	0.7	0.8	0.9	1.1	
Thermal conductivity (W/m.k)	400°C	0.12	0.12	0.14	0.27	0.32	0.41	0.49
	600°C	0.14	0.14	0.16	0.29	0.34	0.43	0.5
	800°C	0.16	0.17	0.18	0.31	0.36	0.44	0.51
	1000°C	0.18	0.19	0.2	0.33	0.38	0.45	0.53
	1200°C	-	-	-	0.3	0.41	0.47	0.56

Chemical Analysis(%)	Al2O3	37	37	44.5	58	67	73	77
	SiO2	47	44.4	41.2	39.1	31	25.1	21.5
	Fe2O3	0.7	0.7	0.7	0.7	0.6	0.5	0.4
Common size	230 x 114 x 65/75mm 9 "x 4.5" x 2.5"/3"							
	or customized size							

