

TECHNICAL DATA SHEET



Insulating Firebricks

Insulating firebricks is manufactured from high grade refractory powder and materials in good purity. During the process of production, some organic and multiple filling materials are added according to the specific requirement proportion. By compressed in vacuum and sintered under high temperature, the brick has typical advantages including low thermal conductivity, good thermal shock resistance, low heat capacity and low iron content as well as outstanding mechanical flexibility

which has extensive applications in variety of industrial markets.

Features

- Low thermal capacity,
- low thermal conductivity
- Excellent thermal stability
- High purity and low iron content
- Excellent thermal resistance
- Direct access to fire
- Accurate dimension and easy cutting

Applications

- Cracking furnace
- Conversion furnace
- Heating equipment
- Refining equipment
- Hot Blast Stove
- Ceramics kiln

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Main Properties

Description	HJM-23			HJM-26		HJM-28		HJM-30	HJM-32
	A	B	C	26	26A	28	28A		
Chemical Composition (%)									
Al ₂ O ₃	35	37	45	51	56	60	65	71	75
SiO ₂	55	53	49	44	40	36	32	26	23
Fe ₂ O ₃	1	1	0.9	0.8	0.8	0.67	0.65	0.6	0.55
K ₂ O+Na ₂ O	1.4	1.3	0.23	1.2	1.1	0.9	0.8	0.8	0.8

Physical properties

Density (kg/m ³)	480	600	800	800	800	900	900	1100	1200
Classification Temperature(°C)	1200	1250	1300	1400	1430	1490	1530	1650	1730
Cold Rushing Strength (MPa)	1.1	1.2	2.2	2.3	2.5	2.8	2.9	3.5	4.0
Modulus of Ruputre (MPa)	0.9	1.1	1.2	1.5	1.5	1.8	1.8	2.0	2.1
Permanent Linear Change(%)X24h	1150-0.5	1200-0.3	1250-0.2	1300-0.4	1400-0.4	1450-0.9	1500-1.0	1550-1.1	1650±1.1
Thermal Expansion(%)1000°C	0.5	0.6	0.7	0.7	0.7	0.8	0.85	0.9	1.1

Thermal Conductivity (W/m.k)

350°C	0.13	0.17	0.23	0.23	0.21	-	-	-	
400°C	-	-	-	0.25	0.22	0.34	0.33	0.38	0.48
600°C	-	-	-	0.26	0.235	0.37	0.35	0.4	0.52
1250°C	-	-	-	0.28	0.265	0.46	0.43	0.48	0.58