# LUYANGWOOL INSULATING FIREBRICK

# **Insulating Firebrick**



#### **Details**

## **Descriptions**

Luyang® insulating firebrick gains typical advantages including low thermal conductivity, fine thermal shock resistance, low heat containment and low iron content ,meanwhile, the outstanding mechanical flexibility, coupled with high insulating efficiency expands the extensive applications of IFB in a variety of industrial markets.

Our insulating firebrick is manufactured from high-grade refractory powder and materials in good purity. During the process of production, organic and multiple filling materials are injected according to the required proportion, the brick is compressed in vacuum and sintered under high temperature.

#### **Features**

Low thermal conductivity
High purity and low iron content
Good thermal resistance with direct access to
fire

Superior thermal shock resistance Accurate dimension and easy cutting

### **Typical Applications**

Cracking Furnace
Conversion Furnace
Heating equipment
Refining equipment
Reproduction equipment
Hot Blast Stove

## **Typical Parameters**

Description	Grade 23	Grade 26	Grade 28	Grade 30
Chemical Composition (%)				
$Al_2O_3$	42	56	67	73
SiO <sub>2</sub>	55	41	30	24
Fe <sub>2</sub> O <sub>3</sub>	≤1	≤0.8	≤0.7	≤0.7
$K_2O + Na_2O$	1.1	1.7	1.7	1.7
Physical Properties				
Density (kg/m³)	600	800	900	1000
Classification Temperature (°C )	1300	1400	1500	1550
Cold Crushing Strength (MPa)	1.2	1.8	2.5	3.3
Modulus of Rupture (MPa)	1.0	1.7	2.3	3.1
Permanent Linear Change(%)x 24hrs	≤0.6	≤0.6	≤0.8	≤0.9
Thermal Expansion(%)1000°C	0.5	0.52	0.52	0.53
Thermal Conductivity (W/m.k)				
350°C	0.18	0.25	0.33	0.38
400 °C	0.20	0.29	0.35	0.40
600 °C	0.24	0.32	0.37	0.42

The data shown are average results of tests under standard procedures and are subject to variation. Results should not be used for specification purposes or creating any contractual obligation. For more information on the safety application or materials, please refer to the work practices and material safety data sheet obligation. For more information on the safety application or materials, please refer to the work practices and material safety data sheet.