## **INSULATING BRICKS**

BRAND NAME	Mahakoshal HFI-110	Mahakoshal HFK-135	Mahakoshal HFK-140	Mahakoshal P-500
PHYSICAL PROPERTIES				
Bulk Density (g/cc) Max.	1.00	1.10	1.00	0.55
Apparent Porosity (%) Min.	60	60	60	-
CCS (kg/cm <sup>2</sup> ) Min.	25	30	25	7
Service Temperature (°C) Max.	1100	1350	1400	1300
Nature of Bond	Ceramic	Ceramic	Ceramic	Chemico-Ceramic
Base Raw Materials	Fire Clay, Mica	Fire Clay, Kyanite	Fire Clay, Kyanite	Synthetic Alumina
CHEMICAL ANALYSIS (wt%)				
Al <sub>2</sub> O <sub>3</sub> (Min.)	20	30	40	40
Fe <sub>2</sub> O <sub>3</sub> (Max.)	2.0	2.0	2.0	1.0
THERMAL PROPERTIES				
PCE ( <sup>0</sup> C/OC) Min.	1564/20	1659/29	1665/30	1605/23
PLC (%) Max.	±0.5 at 1100 ° C/5h	±1.5 at 1350°C/5h	±1.5 at 1400°C/5h	±1.05 at 1300 <sup>0</sup> C/5h
RTE (%) at 1000 <sup>0</sup> C Max.	0.50	0.50	0.50	0.55
Thermal Conductivity (W/m.K) at:				
Hot Face Temperature of 300°C	-	-	-	-
Hot Face Temperature of 500°C	0.3	0.35	0.35	-
Hot Face Temperature of 800°C	-	-	-	0.26
APPLICATIONS AREAS	Back up Lining for Boiler, Reheating Furnace	Back up Lining for Glass Tank Furnace, Blast Furnace	Back up Lining for Glass Tank Furnace, Blast Furnace	Back up Lining for Special Applications







Insulating Brick



Insulating Brick

## NOTES

- 1) Size Tolerance:  $\pm$  1.5% or  $\pm$  2.0mm whichever is greater
- Mahakoshal does not warrant the accuracy, fitness for purpose or updates of any information disclosed herein.
  Specification of the products may change based on the geographical area to be supplied.
- 3) Data shown are based on average results of production samples and are subject to normal variation during individual tests.
- 4) Max. and Min. values are given separately for testing purposes.
- 5) The information contained herein are exclusive property of Mahakoshal.

## **INSULATING BRICKS**

BRAND NAME	Mahakoshal P-650	Mahakoshal P-700	Mahakoshal P-750
PHYSICAL PROPERTIES			
Bulk Density (g/cc) Max.	0.65	0.80	0.80
Apparent Porosity (%) Min.	-		150
CCS (kg/cm <sup>2</sup> ) Min.	25	13	40
Service Temperature (°C) Max.	1430	1400	1430
Nature of Bond	Chemico-Ceramic	Chemico-Ceramic	Chemico-Ceramic
Base Raw Materials	Synthetic Alumina	Synthetic Alumina	Synthetic Alumina
CHEMICAL ANALYSIS (wt%)			
Al <sub>2</sub> O <sub>3</sub> (Min.)	52	55	50
Fe <sub>2</sub> O <sub>3</sub> (Max.)	1.5	1.5	1.5
THERMAL PROPERTIES			
PCE ( <sup>0</sup> C/OC) Min.	1665/30	1665/30	1683/31
PLC (%) Max.	±1.5 at 1430 <sup>0</sup> C/5h	±1.5 at 1400° C/5h	±1.5 at 1430 <sup>0</sup> C/5h
RTE (%) at 1000 <sup>0</sup> C Max.	0.55	0.55	0.55
Thermal Conductivity (W/m.K) at:			
Hot Face Temperature of 300°C	-	-	-
Hot Face Temperature of 500°C		-	-
Hot Face Temperature of 800°C	0.33	0.35	0.35
APPLICATIONS AREAS	Back up Lining for Special Applications	Back up Lining for Special Applications	Back up Lining for Special Applications

## NOTES

- 1) Size Tolerance:  $\pm$  1.5% or  $\pm$  2.0mm whichever is greater
- Mahakoshal does not warrant the accuracy, fitness for purpose or updates of any information disclosed herein.
  Specification of the products may change based on the geographical area to be supplied.
- 3) Data shown are based on average results of production samples and are subject to normal variation during individual tests.
- 4) Max. and Min. values are given separately for testing purposes.
- 5) The information contained herein are exclusive property of Mahakoshal.