FIRE CLAY & HIGH ALUMINA BRICKS

Product Name	Chemical Analysis (wt%)		Apparent Porosity (%)	Bulk Density (g/cc) Min.	CCS (kg/cm^2)	PLC (%)	PCE ($^0C/OC$) Min.	RUL ($T_a{}^0C$)	Application Area
	Al_2O_3	Fe_2O_3							
Mahakoshal 30D	28-31	1.7-2.2	13-18	2.10	400-700	±0.5 at 1300^0 C/2h	-	1330-1360	Back up of Aluminium Pot Furnace and other applications.
Mahakoshal 40	36-40	2.5-3.5	17-22	2.15	350-550	-0.8 to 0.3 at 1400^0C/2h	1659/29	1350-1400	Cement Preheater, Cyclone, Silicate Furnace & other moderate heat applications.
Mahakoshal 40S	38-41	1.8-2.5	16-21	2.20	400-600	-1.0 to 0.3 at 1450^0C/2h	1665/30	1370-1420	Special bricks for Cement Preheater & Cyclone.
Mahakoshal 42D	41-43	1.3-1.7	15-18	2.25	450-650	-0.6 to 0.2 at 1450^0 C/2h	1717/32	1450-1480	Dense brick for Blast Furnace & Anode Baking Furnace (ABF)
Mahakoshal 45	42-45	2.5-3.5	17-22	2.23	400-600	-0.8 to 0.3 at 1400^0 C/2h	1665/30	1360-1410	Cement Preheater, Cyclone, Silicate Furnace & other moderate heat applications.
Mahakoshal 45S	42-46	1.8-2.3	16-21	2.25	400-600	-0.8 to 0.3 at 1450^0 C/2h	1683/31	1390-1440	Special purpose Cement Preheater, Cyclone, Chemical Plants, Sulphur Furnaces, Lime Kiln & Glass Tank Furnace.
Mahakoshal 45D	44-48	1.2-1.5	14-18	2.35	450-700	-0.5 to 0.2 at 1450^0 C/2h	1743/33	1460-1500	Blast Furnace, Prehaeting Zone of Cement Rotary Kiln, Lime Kiln & Glass Tank Furnace.
Mahakoshal RW	-	-	17-21	2.25	400-600	-1.0 to 0.2 at 1450^0 C/2h	1683/31	1390-1440	Reheating Furnace Wall.
Mahakoshal 50	47-50	2.6-3.5	17-21	2.32	450-650	-0.8 to 0.4 at 1450^0 C/2h	1717/32	1400-1450	Preheating Zone of Cement Rotary Kiln & Reheating Furnace Wall.
Mahakoshal 50S	47-50	1.8-2.2	16-21	2.30	450-650	-1.0 to 0.3 at 1450^0 C/2h	1717/32	1400-1450	Dense brick for Petro-Chemicals, Fertilizer Plants & Anode Baking Furnace.
Mahakoshal RR	-	-	16-22	2.35	450-650	-0.5 to 1.0 at 1450^0 C/2h	1743/33	1430-1480	Reheating Furnace Roof.
Mahakoshal 55	52-55	2.9-3.9	17-22	2.42	450-650	-0.5 to 1.0 at 1450^0 C/2h	1743/33	1400-1440	Preheating Zone of Cement Rotary Kiln & Reheating Furnace Wall.
Mahakoshal 55S	52-56	1.7-2.2	16-21	2.35	500-700	-0.8 to 0.3 at 1500^0 C/2h	1763/34	1450-1500	Reheating Furnace Roof & Petro-Chemicals.
Mahakoshal SILL	56-59	1.0-1.5	17-21	2.35	400-600	±0.7 at 1500^0 C/2h	1804/36	1500-1540	Glass Tank Furnace & Frit Furnace.
Mahakoshal 60	57-60	3.4-4.2	17-22	2.50	550-800	-0.4 to 2.0 at 1450^0 C/2h	1785/35	1420-1450	Reheating Furnace Wall, Ladle Back up.
Mahakoshal 60L	57-61	2.8-3.8	17-22	2.45	500-800	-0.2 to 2.2 at 1500^0 C/2h	1785/35	1430-1470	Reheating Furnace Wall, Ladle Back up.
Mahakoshal 60S	58-61	1.7-2.2	16-21	2.45	500-800	-0.4 to 0.8 at 1500^0 C/2h	1804/36	1470-1510	Sulphur Furnace, Alakli Resistant Bricks For Cement Rotary Kiln & ladle Back up.
Mahakoshal 60M	59-61	0.9-1.1	14-18	2.45	600-800	±0.5at 1600^0 C/2h	1820/37	1630-1670	Blast Furnace Stove Checkers, Solid Wall Bricks & Glass Tank Furnace.
Mahakoshal 62DB	61-63	1.2-1.7	14-18	2.45	500-800	±0.8 at 1500^0 C/2h	1785/35	1500-1530	Blast Furnace Stove Checkers, Solid Wall Bricks & Glass Tank Furnace.
Mahakoshal 62D	61-64	1.2-1.5	13-16	2.50	600-900	±0.5 at 1500^0 C/2h	1804/36	1500-1550	Blast Furnace Hearth, Non-Recovery Coke Oven, Glass Tank Furnace & Frit Furnace.
Mahakoshal 62BRN	62-64	0.9-1.2	12-15	2.50	650-900	±0.2 at 1500^0 C/2h	1820/37	1500-1550 at $4kg/cm^2$	Blast Furnace Hearth, Non-Recovery Coke Oven, Glass Tank Furnace.
Mahakoshal 70N	64-67	3.5-4.4	17-23	2.55	500-800	0.5 to 2.5 at 1450^0 C/2h	1804/36	1440-1470	Boiler, Cupola & Steel Foundry
Mahakoshal 70	67-70	3.4-4.0	17-22	2.60	600-900	0.3 to 2.5 at 1450^0 C/2h	1804/36	1460-1480	Boiler, Cupola, Steel Foundry & Reheating Furnace.
Mahakoshal 70S	67-70	2.8-3.2	17-22	2.60	600-900	0.5 to 3.0 at 1500^0 C/2h	1804/36	1460-1480	Burning Zone of Cement Rotary Kiln & Steel Ladle.
Mahakoshal 70L	67-70	2.4-2.8	16-21	2.55	600-800	0.5 to 2.5 at 1500^0 C/2h	1804/36	1460-1490	Burning Zone of Cement Rotary Kiln & Steel Ladle.
Mahakoshal 70/20	68-71	1.8-2.2	16-21	2.55	600-900	0.2 to 2.0 at 1500^0 C/2h	1804/36	1470-1500	Burning Zone of Cement Rotary Kiln & Steel Ladle.

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	Al_2O_3	Fe_2O_3							
Mahakoshal 70LI	68-72	1.4-1.8	16-21	2.55	600-900	-0.2 to 2.0 at $1500^0C/2h$	1820/37	1500-1530	Burning Zone of Cement Rotary Kiln, Lime Kiln & Steel Ladle.
Mahakoshal 70M	69-72	0.4-0.8	15-18	2.55	600-900	-0.2 to 0.5 at $1600^0C/2h$	1820/37	1650-1700	Blast Furnace Hearth & Taphole, Lime Kiln, Glass Tank Furnace & Non-recovery Coke Oven.
Mahakoshal 75	71-75	2.8-3.5	17-22	2.65	600-900	0.3 to 3.0 at $1500^0C/2h$	1804/36	1470-1490	Blast Furnace Hearth, Lime Kiln, Glass Tank Furnace & Non-recovery Coke Oven.
Mahakoshal 80S	74-77	2.8-3.5	17-22	2.72	700-950	-0.5 to 2.5 at $1550^0C/2h$	1820/37	1470-1500	EAF Roof, Steel Rolling Mill & Steel Ladle.
Mahakoshal 80L	77-80	2.2-2.7	17-22	2.72	700-900	-0.5 to 2.5 at $1550^0C/2h$	1820/37	1490-1520	EAF Roof, Steel Rolling Mill, Steel Ladle & other high heat duty special applications.
Mahakoshal 80	78-81	1.5-2.0	15-19	2.75	750-1000	0.5 to 1.2 at $1550^0C/2h$	1820/37	1520-1550	EAF Roof, Steel Rolling Mill, Steel Ladle & other high heat duty special applications.
Mahakoshal 80P	78-81	1.5-2.0	14-18	2.80	800-1100	0.5 to 1.2 at $1550^0C/2h$	1820/37	1520-1550	Phosphate-bonded bricks for Reheating Furnace Bottom & other high Abrasion Resistant applications.
Mahakoshal 85	82-85	1.4-1.8	15-19	2.80	750-1000	-0.3 to 1.0 at $1550^0C/2h$	1850/38	1540-1580	Special high temperature, high abrasion & spalling resistant applications like Torpedo Ladle etc.
Mahakoshal 85P	82-85	1.4-1.8	13-17	2.85	850-1200	-0.3 to 1.0 at $1550^0C/2h$	1850/38	1540-1580	Non-wetting Phosphate-bonded bricks for Aluminium Melting & Holding Furnace, Reheating Furnace Bottom etc.
Mahakoshal 88RB	86-89	1.0-1.8	12-16	2.90	900-1200	-0.2 to 0.5 at $1500^0C/2h$	1820/37	1580-1620	Reheating Furnace Bottom (specially Coal-fired).
Mahakoshal 90	88-92	0.4-0.8	12-16	3.05	1000-1300	$\pm$0.5 at $1550^0C/2h$	1850/38	1620-1660	Petro-chemicals, Fertilizers, Carbon Black Reactor & Blast Furnace Hearth.
Mahakoshal SIC85	SiC = 80-85	0.5-1.0	14-17	2.50	600-800	-0.2 to 0.5 at $1400^0C/2h$	-	1620-1680	Ferro-Alloy Industries, Copper Melting Furnace (in Burner Block & Impact Pad areas), Boiler (for very high temperature & Reducing Atmosphere)
Mahakoshal SIC88	SiC = 84-88	0.5-0.8	14-17	2.50	600-900	-0.2 to 0.5 at $1400^0C/2h$	-	1650-1700	Ferro-Alloy Industries, Copper Melting Furnace (in Burner Block & Impact Pad areas) & Boiler (for high temperature & Reducing Atmosphere applications).


Hanger Brick


Shoulder Brick


Pit Brick (Riedhammer)

SD Well Block


Sillicon Carbide Lintel Block


Sillicon Carbide Well Block


Checkers

NOTES

1) Size Tolerance: $\pm$ 1.5% or $\pm$ 2.0mm whichever is greater
2) 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.