

PREMIER REFRACTORIES OF INDIA PVT. LTD.

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Specification - Fire Clay & High Alumina Bricks

BRAND NAME	PRIL - 30	PRIL - 30 D	PRIL - 30 S	PRIL - 35	PRIL - 40	PRIL - 40 D	PRIL - 40 S	PRIL - 42 D	PRIL - 45	PRIL - 45 D	PRIL - 45 S	PRIL - 50	PRIL - 50 D	PRIL - 50 S	PRIL - 55	PRIL - 55 S
PHYSICAL PROPERTIES																
Max Service temperture	1350	1350	1350	1350	1400	1400	1450	1450	1400	1450	1450	1400	1450	1450	1450	1500
RTE at 1000 °C, %	0.50	0.50	0.50	0.50	0.55	0.50	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.60	0.60
Refractoriness , OC / °C, min	28 / 1646	29 / 1659	29 / 1659	29 / 1659	31 / 1683	30 / 1665	32 / 1717	33 / 1743	31 / 1683	34 / 1763	33 / 1743	33 / 1743	34 / 1765	33 / 1743	34 / 1763	35 / 1785
Apparent Porosity, %, min	23	18	22	22	22	17	22	17	22	18	21	22	18	23	23	22
Bulk Density , gm / cc	2.10	2.15	2.10	2.10	2.20	2.25	2.20	2.25	2.25	2.30	2.25	2.35	2.35	2.25	2.40	2.30
CCS, Kg / cm ² , min	300	400	350	300	350	500	350	550	400	500	350	450	500	450	450	450
THERMAL PROPERTIES																
RUL (Ta) °C, min	1320	1350	1330	1350	1380	1400	1400	1460	1400	1500	1450	1400	1500	1400	1450	1480
PLC, %, max after heating at 1350°C / 3 hrs after heating at 1400°C / 3 hrs	± 0.80 -	± 0.80 -	± 0.60 -	± 0.80 -	- ± 0.80	- ± 0.50	- ± 0.80	- ± 0.50	± 1.00 -	- ± 0.80	- ± 0.80	± 1.00 -	± 0.50 -	- ± 1.50	± 1.50 -	- ± 1.00
CHEMICAL ANALYSIS																
Al ₂ O ₃ , %, min	30.00	30.00	30.00	35.00	40.00	40.00	40.00	42.00	45.00	45.00	45.00	50.00	50.00	55.00	50.00	55.00
Fe ₂ O ₃ , %, max	3.00	2.00	2.00	3.00	3.00	2.00	2.30	1.50	3.50	1.30	2.00	3.50	1.30	3.50	2.25	

Size Tolerance : ± 1.5% or ± 2 mm whichever is greater.

BRAND NAME	PRIL - 60	PRIL - 60 S	PRIL - 60 M	PRIL - 62 D	PRIL - 70	PRIL - 70 L	PRIL - 70 M	PRIL - 70 S	PRIL - 70 LF	PRIL - 75	PRIL - 80	PRIL - 80 B	PRIL - 85	PRIL - 90	PRIL - 90 D	PRIL - SIC
PHYSICAL PROPERTIES																
Max Service temperture	1450	1500	1650	1600	1450	1480	1700	1470	1500	1480	1650	1650	1650	1650		1500
RTE at 1000 °C, %	0.60	0.60	0.60	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.75	0.75	0.80	0.85		19
Refractoriness , OC / °C, min	35 / 1785	36 / 1804	37 / 1820	36 / 1804	36 / 1804	37 / 1820	38 / 1835	37 / 1820	37 / 1820	37 / 1820	37 / 1820	37 / 1820	38 / 1835	38 / 1835	38 / 1835	2.40
Apparent Porosity, %, min	22	22	18	18	23	23	18	23	23	23	18	20	18	16	18	700
Bulk Density , gm / cc	2.50 - 2.55	2.35	2.45	2.45 - 2.50	2.60	2.55	2.55	2.60	2.55	2.65	2.75	2.75	2.80	2.90	2.90	150
CCS, Kg / cm ² , min	450	450	600	600	600	600	600	450	600	600	750	700	800	900	800	14.50
THERMAL PROPERTIES																
RUL (Ta) °C, min	1450	1500	1650	1500	1460	1480	1650	1470	1480	1480	1550	1500	1550	1580	1630	
PLC, %, max after heating at 1450°C / 3 hrs after heating at 1500°C / 2 hrs	-	- ± 0.80	-	± 0.20	-	± 2.00	-	± 2.00	± 2.00	± 2.00	± 1.00	± 2.00	± 1.00	± 0.60	-	
CHEMICAL ANALYSIS																
Al ₂ O ₃ , %, min	57 - 60	60.00	60.00	62.00	67 - 70	67 - 70	70.00	67 - 70	67 - 70	75.00	78 - 79	79.00	84.00	90.00	90.00	
Fe ₂ O ₃ , %, max	3.50	2.00	1.00	1.50	3.50	2.50	0.30	3.00	2.00	3.40	1.50	1.90	1.50	1.30	0.30	

Size Tolerance : ± 1.5% or ± 2 mm whichever is greater.