

**Rate Chart for the Characterization Facilities at
“IIT BHU-IRMA Centre of Excellence in Refractories”**

Sl. No.	Name of the Test(s)	IRMA Members	IIT (BHU) (Internal)	Educational/Research Institute Govt. of India	Others
1	Sieve Analysis as per IS:1528 - Dry	700.00	100.00	400.00	1000.00
2	Sieve Analysis as per IS:1528 - Wet	1000.00	150.00	500.00	1200.00
3	Size Tolerance	230.00	50.00	150.00	250.00
4	PCE as per IS:1528	2,300.00	1000.00	1500.00	3000.00
5	RUL as per IS:1528	1,800.00	700.00	1200.00	2100.00
6	PLCR as per IS:1528 - Upto 1400°C - 5 Hours	3,500.00	1200.00	1700.00	4600.00
7	PLCR as per IS:1528 - Above 1400°C upto 1600°C - 5 Hours	4,500.00	1500.00	4000.00	5500.00
8	Spalling Resistance test as per IS:1528	5,000.00	1700.00	4200.00	6000.00
9	CCS as per IS:1528	700.00	100.00	400.00	1000.00
10	MOR as per IS:1528	700.00	100.00	400.00	1000.00
11	Apparent Porosity/bulk density/apparent specific gravity as per IS:1528	700.00	100.00	400.00	1000.00
12	True density / specific gravity as per IS:1528	850.00	120.00	500.00	1100.00
13	True density / closed porosity as per IS:1528	1,400.00	200.00	750.00	1800.00
14	Compressive strength / modulus of rupture of monolithics & castable as per IS:10570				
i)	After 24 hours curing	1,000.00	150.00	500.00	1200.00
ii)	After 72 hours curing	1,200.00	200.00	700.00	1500.00
iii)	After firing at Temp - Upto 1000°C - 3 Hours	2,800.00	1200.00	1900.00	4000.00
iv)	After firing at Temp - Upto 1400°C - 3 Hours	4,000.00	1500.00	2200.00	1500.00
v)	After firing at Temp - Upto 1500°C - 3 Hours	4,500.00	1600.00	2300.00	5000.00

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15	Sintering at various Temperature				
i)	Upto 1000°C - 3 Hours	2,300.00	1000.00	1500.00	3000.00
ii)	Upto 1400°C - 3 Hours	3,500.00	1400.00	2000.00	4200.00
iii)	Upto 1500°C - 3 Hours	4,000.00	1500.00	2200.00	4500.00
16	Cutting of dense & hard bricks	600.00	50.00	350.00	1000.00
17	Fabrication of Castable sample	850.00	120.00	500.00	1100.00
18	Static Cup Slag Resistance	5000.00	2000.00	3000.00	6000.00
19	Chemical Analysis				
i)	Quantitative Chemical Analysis by wet Chemical Method for determination of each of the following constituents, SiO ₂ , Fe ₂ O ₃ , TiO ₂ , CaO, MgO, MnO ₂	1500.00	500.00	1200.00	3000.00
ii)	Quantitative Chemical Analysis by wet Chemical Method for determination of each of the following constituents, Al ₂ O ₃ , ZrO ₂ , Cr ₂ O ₃ , P ₂ O ₅	2600.00	2000.00	2200.00	4000.00