

Physical requirement of all grades of Cement (OPC)

Characteristics	Requirements for Grade of cements					Test Method
	G 33	G 43	G 43 S	G 53	G 53 S	
i) Fineness,						
m ² /kg, <i>Min</i>	225	223	370	225	370	IS 4031 (Part 2)
ii) Soundness By,						
Le-Chatelier method mm Max	10	10	5	10	5	IS 4031 (Part 3); see Note 1
Autoclave method percent Max	0.8	0.8	0.8	0.8	0.8	
iii) Setting Time (minutes)						
Initial Min	30	30	60	30	60	
Final Max	600	600	600	600	600	
iv) Compressive Strength MPa						
a) 72 ± 1 h, <i>Min</i>	16	23	23	27	27	
b) 168 ± 2 h <i>Min</i>	22	33	37.5	37	37.5	
c) 672 ± 4 h, <i>Min</i>	33	43	43	53	53	
<i>Max</i>	48	58	–	–	–	
v) Transverse strength (optional)						IS 4031 (Part 8); see Note 3 and 4
TechConsults						