

Date:

Sr. No.:

Sample:Portiand Cement Type 2

Acc.To:ISIRI389,BS EN 197-1

Chemical Analysis			Chemical Requirements	
Compounds		Results	ISIRI389	EN197-1
SiO ₂	%	21.25	Min 20	
Al ₂ O ₃	%	4.83	Max 6.0	
Fe ₂ O ₃	%	3.34	Max 6.0	
CaO	%	62.75		
MgO	%	3.82	Max 5.0	
SO ₃	%	1.76	Max 3.0	<=4
Na ₂ O	%	0.18		
K ₂ O	%	0.51		
CL	%	0.05		
L.O.I	%	0.87	Max 3.00	<=5
Insoluble Residue	%	0.48	Max 0.75	<=5
Total		99.83		
Composition According to BOGUE				
C ₃ S	%	51.5		
C ₂ S	%	22.1		
C ₃ A	%	7.15	Max 8.0	
C ₄ AF	%	10.2		
CaO free	%	0.78		
CaSO ₄	%	2.99		
Physical Tests				
Fineness:Blaine	cm ² /g	3150	2800 (Min)	
Autoclave Expansion	%	0.13	0.8 (Max)	
Compressive Strength				
3 days	Kg/Cm ²	193	100 (Min)	
7 days	Kg/Cm ²	269	175 (Min)	
28 days	Kg/Cm ²	397	315 (Min)	>=325
Setting Time (Vicat)				
Initial	Min	135	45 (Min)	>=75
Final	hr	2.55	6 (max)	