

Bagheran Cement CO.
Quality Control Test Report



Portland Cement Type v				Acc to : ISIRI 389
Chemical Analysis				Chemical Requirements
Test Parameters		Unit	Results	ISIRI 389
Silicon Dioxide	SiO ₂	%	21.93	—
Aluminium Oxide	Al ₂ O ₃	%	4.6	—
Ferric Oxide	Fe ₂ O ₃	%	4.4	—
Calcium Oxide	CaO	%	63.2	—
Magnesium Oxide	MgO	%	1.6	Max-5.0
Sulfur Trioxide	SO ₃	%	2.11	Max-2.3
Potassium Oxide	K ₂ O	%	0.43	—
Sodium Oxide	Na ₂ O	%	0.57	—
Chloride	CL	%	0.025	—
Loss on Ignition	LOI	%	1.00	Max-3.0
Free Cao	F.CaO	%	0.9	—
Insoluble Residue	IR	%	0.62	Max-0.75
Tricalcium Silicate	C3S	%	47.52	—
Dicalcium Silicate	C2S	%	27.05	—
Tricalcium Aluminate	C3A	%	4.75	Max-5.0
Calcium Alumino Ferrite	C4AF	%	13.39	—
Physical Properties				Physical Requirements
Test Parameters		Unit	Results	ISIRI 389
Fineness	Blaine	Cm ² /gr	3000	Min-2800
Setting Time	Initial	min	150	Min-45
	Final	min	190	Max -360
Soundness	Autoclave Exp	%	0.03	Max -0.8
	Le chatelire	mm	0.8	—
Compressive Strength	3 Days	kg/cm ²	180	Min-100
	7Days	kg/cm ²	290	Min-175
	28 Days	kg/cm ²	390	Min-315

Lab. Manager;