

Bagheran Cement CO.
Quality Control Test Report



Portland Cement Type 1-425				Acc to : ISIRI 389
Chemical Analysis				Chemical Requirements
Test Parameters		Unit	Results	ISIRI 389
Silicon Dioxide	SiO ₂	%	21.63	—
Aluminium Oxide	Al ₂ O ₃	%	5.2	—
Ferric Oxide	Fe ₂ O ₃	%	3.35	—
Calcium Oxide	CaO	%	63.34	—
Magnesium Oxide	MgO	%	1.70	Max-5.0
Sulfur Trioxide	SO ₃	%	2.35	Max-3.0
Potassium Oxide	K ₂ O	%	0.43	—
Sodium Oxide	Na ₂ O	%	0.57	—
Chloride	CL	%	0.025	—
Loss on Ignition	LOI	%	1.03	Max-3.0
Free Cao	F.CaO	%	0.9	—
Insoluble Residue	IR	%	0.58	Max-0.75
Tricalcium Silicate	C3S	%	47.17	—
Dicalcium Silicate	C2S	%	26.45	—
Tricalcium Aluminate	C3A	%	8.12	—
Calcium Alumino Ferrite	C4AF	%	10.19	—
Physical Properties				Physical Requirements
Test Parameters		Unit	Results	ISIRI 389
Fineness	Blaine	Cm ² /gr	3100	Min-2800
Setting Time	Initial	min	140	Min-45
	Final	min	190	Max -360
Soundness	Autoclave Exp	%	0.07	Max -0.8
	Le chatelire	mm	0.7	—
Compressive Strength	2 Days	kg/cm ²	190	Min-100
	3 Days	kg/cm ²	220	—
	7Days	kg/cm ²	310	—
	28 Days	kg/cm ²	435	Min-425; Max -625

Lab. Manager;