

Bagheran Cement CO.
Quality Control Test Report



Portland-pozzolana cement				Acc to : ISIRI 389
Chemical Analysis				Chemical Requirements
<i>Test Parameters</i>		Unit	Results	ISIRI 389
<i>Silicon Dioxide</i>	<i>SiO₂</i>	%	28.5	—
<i>Aluminium Oxide</i>	<i>Al₂O₃</i>	%	6.7	—
<i>Ferric Oxide</i>	<i>Fe₂O₃</i>	%	3.5	—
<i>Calcium Oxide</i>	<i>CaO</i>	%	54	—
<i>Magnesium Oxide</i>	<i>MgO</i>	%	1.6	Max-6.0
<i>Sulfur Trioxide</i>	<i>SO₃</i>	%	2	Max-4.0
<i>Potassium Oxide</i>	<i>K₂O</i>	%	0.43	—
<i>Sodium Oxide</i>	<i>Na₂O</i>	%	0.57	—
<i>Chloride</i>	<i>CL</i>	%	0.035	Max-0.1
<i>Loss on Ignition</i>	<i>LOI</i>	%	1.5	Max-5.0
<i>Free Cao</i>	<i>F.CaO</i>	%	0.9	—
<i>Insoluble Residue</i>	<i>IR</i>	%	—	—
<i>Tricalcium Silicate</i>	<i>C3S</i>	%	—	—
<i>Dicalcium Silicate</i>	<i>C2S</i>	%	—	—
<i>Tricalcium Aluminate</i>	<i>C3A</i>	%	—	—
<i>Calcium Alumino Ferrite</i>	<i>C4AF</i>	%	—	—
Physical Properties				Physical Requirements
<i>Test Parameters</i>		Unit	Results	ISIRI 389
Fineness	Blaine	Cm²/gr	3100	Min-3000
Setting Time	Initial	min	150	Min-60
	Final	min	210	Max -420
Soundness	Autoclave Exp	%	0.08	Max -0.8
	Le chatelire	mm	0.8	—
Compressive Strength	3 Days	kg/cm²	180	Min-100
	7Days	kg/cm²	270	Min-175
	28 Days	kg/cm²	380	Min-300

Lab. Manager;