

QUALITY CERTIFICATE

Product	Portland Cement Type 2 (M 500)
Standard	ISIRI 389,EN197-1,GOST 10178
Ship	
Date	

Producer	Peyvand Golestan Cement Co First Floor, Nr. 1, Secand Alley, Pakistan St., Beheshti St., Tehran Tel : 021 88175135 , 88174029 Fax : 02188174081 www.Pgcement.ir
Email:	pgcement@pgcement.ir

Physical Properties	Factory test result	Standard (ISIRI-389)	GOST 10178	Unit
Setting Time (Vicat ,Initial)	170	Min 45	Min 45	Minute
Setting Time (Vicat ,Final)	3.5	Max 6:00	Max 10:00	hr
Expansion (Autoclave)	0.1	Max 0.8	Max 0.8	%
Specific Surface Area (Blaine)	3250	Min 2800	Min 2800	cm2/gr
Residue on 90m Sieve	1			%
Compressive Strength (1 day)				kg/cm2
Compressive Strength (2 days)				kg/cm2
Compressive Strength (3 days)	270	Min 100		kg/cm2
Compressive Strength (7 days)	395	Min 175		kg/cm2
Compressive Sterngh (28 days)	545	Min 315	Min500	kg/cm2

Chemical Analysis	Factory test result	Standard (ISIRI - 389)	GOST 10178	Unit
SiO2	20.8	Min 20.00		%
Al2O3	5.2	Max 6.00		%
Fe2O3	3.65	Max 6.00		%
CaO	63.3		%
MgO	1.8	Max 5.00	Max 5.00	%
SO3	2.5	Max 3.00	Max 3.50	%
Insoluble Residue	0.3	Max 0.75		%
Loss On Ignation	2.1	Max 3.00		%
Free CaO	1.2			%
K2O	0.55			%
Na2O	0.3			%

Modulus	Factory test result	Standard (ISIRI - 389)	GOST 10178	Unit
Lime Saturation Factor (LSF)	92.21			%
Silica Modulus (SM)	2.35			
Alomina Modulus (AM)	1.42			

Mineralogical Composition	Factory test result	Standard (ISIRI - 389)	GOST 10178	Unit
C3S	52.4			%
C2S	20.4			%
C3A	7.61	Max 8.00		%
C4AF	11.1			%

Factory Management

Lab &QC Manager