

شهادة أسمنت بورتلاندي

PORTLAND CEMENT CERTIFICATE

Type of Cement	: Type I	أسمنت بورتلاندي صنف I
Standard	: ASTM C-150-19	
Week No.	: 07/20	
Sample Date	: 12-18.02.2020	تاريخ العينة :
Issue Date	: 21-Mar-20	

Parameters	Units	Results %	Specification	
Chemical Test Results				
Loss On Ignition	LOI	%	2.97	Max. 3.0 %
Silicon Dioxide	SiO ₂	%	20.16	
Aluminium Oxide	Al ₂ O ₃	%	4.74	
Ferric Oxide	Fe ₂ O ₃	%	3.43	
Calcium Oxide	CaO	%	63.15	
Magnesium Oxide	MgO	%	1.53	Max. 6.0 %
Equivalent Alkali Na ₂ O+0.658K ₂ O		%	0.57	Max. 0.60 %
Sulphur Trioxide	SO ₃	%	2.54	Max 3.0 %
Chloride	Cl	%	0.027	
Insoluble Residue	IR	%	0.34	Max. 1.50 %
Free Lime	Free CaO	%	1.26	
Cement Phases				
Tri Calcium Silicate	C ₃ S	%	54.74	
Di Calcium Silicate	C ₂ S	%	16.58	
Tri Calcium Aluminate	C ₃ A	%	6.76	
Tetra Calcium Alumino ferrate	C ₄ AF	%	10.44	
Physical Test Results				
Fineness (Specific Surface)	Blaines	m ² /kg	358	Min. 260 m ² /kg
+45 µm Residue		%	9.42	
Specific Gravity			3.15	
Initial Setting Time	IST	Minutes	175	Min. 45 minutes
Final Setting Time	FST	Minutes	215	Max. 375 minutes
Soundness-Autoclave	Expansion	%	0.10	Max. 0.80 %
Air Content		%	2.74	Max .12.0 %.
Compressive Strength (MPa)				
3 Days		Mpa	23.8	Min 12.0
7 Days		Mpa	28.9	Min.19.0
28 Days		Mpa	37.2	Min.28.0

We hereby certify that the above described PORTLAND CEMENT TYPE-I, at the time of consignment, meets the chemical and Physical requirements of ASTM C-150-19a.

D. Balasubramanian

Quality Control Manager
(D. Balasubramanian)

