

شهادة أسمنت بورتلاندي

PORTLAND CEMENT CERTIFICATE

Type of Cement : Type I أسمنت بورتلاندي صنف I
 Standard : ASTM C-150-19
 Week No. : 28/20
 Sample Date : 08-14.07.2020 تاريخ العينة :
 Issue Date : 19-Aug-19

Parameters	Units	Results %	Specification	
Chemical Test Results				
Loss On Ignition	LOI	%	2.77	Max. 3.0 %
Silicon Dioxide	SiO ₂	%	20.08	
Aluminium Oxide	Al ₂ O ₃	%	4.84	
Ferric Oxide	Fe ₂ O ₃	%	3.35	
Calcium Oxide	CaO	%	63.09	
Magnesium Oxide	MgO	%	1.94	Max. 6.0 %
Equivalent Alkali Na ₂ O+0.658K ₂ O		%	0.57	Max. 0.60 %
Sulphur Trioxide	SO ₃	%	2.70	Max 3.0 %
Chloride	Cl ⁻	%	0.015	
Insoluble Residue	IR	%	0.31	Max. 1.50 %
Free Lime	Free CaO	%	0.92	
Cement Phases				
Tri Calcium Silicate	C ₃ S	%	55.48	
Di Calcium Silicate	C ₂ S	%	15.80	
Tri Calcium Aluminate	C ₃ A	%	7.16	
Tetra Calcium Alumino ferrate	C ₄ AF	%	10.19	
Physical Test Results				
Fineness (Specific Surface)	Blaines	m ² /kg	348	Min. 260 m ² /kg
+45 µm Residue		%	9.16	
Specific Gravity			3.15	
Initial Setting Time	IST	Minutes	200	Min. 45 minutes
Final Setting Time	FST	Minutes	235	Max. 375 minutes
Soundness-Auotclave	Expansion	%	0.10	Max. 0.80 %
Air Content		%	2.50	Max .12.0 %.
Compressive Strength (MPa)				
3 Days		Mpa	24.6	Min 12.0
7 Days		Mpa	30.1	Min.19.0
28 Days		Mpa	38.4	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.


 Quality Control Manager
 (D. Balasubramanian)

