

QUALITY CERTIFICATE

Sampling Date 04-10-2016

Analysis Date 05-10-2016

Week 40

Cement Type: CEM II /B-LL42,5 N White

Chemical & Physical Properties

Cement Characteristics	Standard	Result	Specifications	Units
SiO ₂	EN 196-2	21.17	-	%
Al ₂ O ₃		1.58	-	%
Fe ₂ O ₃		0.19	-	%
CaO		64.28	-	%
K ₂ O		0.02	-	%
Na ₂ O		0.07	-	%
Alkalis content "Na ₂ O Equ."		0.08		%
Loss in ignition	EN 196-2	10.50		%
F.CaO	EN 196-2	3.70		%
Magnesia (MgO)	EN 196-2	0.29		%
Sulphur Trioxide (SO ₃)	EN 196-2	1.81	≤ 3.5	%
Chloride	EN 196-2	0.035	≤ 0.10	%
Insoluble Residue	EN 196-2	0.62	≤ 5.0	
Whiteness (CIE 1931) Y		86.40		%
Fineness Blaine (cm ² /g)	EN 196-6	4729		cm ² /g
Initial Setting time (min)	EN 196-3	300	≥ 60	min
Final Set (min)	EN 196-3	340		min
Expansion "Le Chatelier" (mm)	EN 196-3	5.0	≤ 10	mm
C3S	Bogue	69.57		%
C3A		3.87		%

Compressive Strength

	Standard	Result	Limits	Units
2 days	EN 196-1	18.05	≥ 10	N/mm ²
28 days		49.70	42.5 ≥ R ≤ 62.5	

The above results complying with requirements EN 197-1/2011& ES 4756-1/2013

 Approval by:
 Lab.&Q.C.
 Y. Mowafi

Cod. :RCPII04102016