

ANALYSIS CERTIFICATE

QUALITY CONTROL DEPARTMENT



Cement Type: **CEM I 52,5 R White**

COMPRESSIVE STRENGTH

CEMENT CHARACTERISTICS	STANDARD	RESULT	SPECIFICATIONS	UNITS
2 days	EN 196-1	33.0 - 40.0	≥ 30	N/mm ²
7 days		50.0 - 60.0		
28 days		65.0 - 70.0	≥ 52.5	

CHEMICAL & PHYSICAL PROPERTIES

CEMENT CHARACTERISTICS	STANDARD	RESULT	SPECIFICATIONS	UNITS
SiO ₂	EN 196-2	22.56	-	%
Al ₂ O ₃		2.69	-	%
Fe ₂ O ₃		0.199	-	%
CaO		67.42	-	%
K ₂ O		0.03	-	%
Na ₂ O		0.12	-	%
Alkalis content "Na ₂ O Equ."		0.14		%
Loss in ignition	EN 196-2	3.14	≤ 5.0	%
Sulphur Trioxide (SO ₃)	EN 196-2	2.52	≤ 4.0	%
Chloride	EN 196-2	0.040	≤ 0.10	%
Insoluble Residue	EN 196-2	0.70	≤ 5.0	%
Cr+6	EN 196-10	0.00007	≤ 0.0002	%
Whiteness (CIE 1931)	Y L*	≥ 86.5		%
		≥ 94.3		
Residue in 0.045 mm Sieve		2.5		%
Residue in 0.090 mm Sieve		0.3		%
Fineness Blaine	EN 196-6	4725		cm ² /g
Initial Setting time	EN 196-3	90-150	≥ 45.0	min
Final Set	EN 196-3	140-180		min
Expansion "Le Chatelier"	EN 196-3	1.0	≤ 10.0	(mm)

The above results complying with requirements EN 197-1/2011

Approval by:
LAB. & Q.C.

