



CEMENTOS ALFA, S.A.

PLANT: MATAPORQUERA

ER Certificate: ER-0572/1998



TECHNICAL CHARACTERISTICS CERTIFICATE

Cement

CEM I 52.5 R MA

Period

October, 2017

CE: 0099/CPR/A33/0831

TESTS	Results Average Value	Standard Spec. EN/UNE
Chemical Characteristics		
Loss on Ignition %	2,7	< 5,0
Insoluble Residue %	0,5	< 5,0
Sulphates (SO ₃) %	3,3	< 4,0
Chlorides %	0,01	< 0,10
Physical and Mechanical Characteristics		
Normal Consistency Water %	30,5	
Initial Setting Time min	163	> 45
Final Setting Time min	218	< 720
Soundness Le Chatelier mm	0,4	< 10
Specific Surface (Blaine) cm ² /g	5012	
Compressive Strength at 2 days MPa		
• Monthly average	38,8	> 30,0
• Cumulative average (11/2016 - 10/2017)	39,1	> 30,0
• Cumulative Std. Dev. (11/2016 - 10/2017)	2,7	
Compressive Strength at 28 days MPa		
• Monthly average	64,1	> 52,5
• Cumulative average (11/2016 - 10/2017)	66,0	> 52,5
• Cumulative Std. Dev. (11/2016 - 10/2017)	2,8	
Additional Characteristics		
C3A * (%)	3,3	
Alkali Equivalent (%)	0,70	< 0,75

* Corresponding to clinker composition

This document doesn't imply that any amount of cement has been supplied by the Company

Barrio la Estación, s/n.
39410 Mataporquera (Cantabria)
Tel. 942 770 058
Fax 942 770 243
info@alfainforma.com
www.valderrivas.es

Chief of Quality Control

