



CONFORMITY CERTIFICATE																																										
Ground Granulated Blastfurnace Slag Produced at		Aboño																																								
Sample Period		March 2020																																								
<b>Certificate of Conformity of GGBS to EN 15167-1:2006</b>		<b>Certificate of Conformity of Combinations of GGBS and CEM I Portland Cement to Annex A of BS 8500-2:2015</b>																																								
Spot samples of GGBS were taken and tested to determine conformity to the autocontrol requirements of EN 15167-1:2006 "Ground granulated blastfurnace slag for use in concrete, mortar and grout" following the methods given in that standard. The values reported are mean values for the monthly production period.		Portland Cement Source:																																								
Aboño GGBS Only		<b>Hope</b>																																								
For combinations of GGBS supplied from the above works with the above CEM I Portland cement the permitted proportions conforming to the requirements given in annex A of BS 8500-2:2015 are:																																										
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Note: If the value of Al <sub>2</sub> O <sub>3</sub> is ≥ 14.5% the '+SR' restriction will be exceeded if the C <sub>3</sub> A of the CEM I is >10%.		Conformity Evaluation Period (if less than 6 months)																																								
Alkalis as Na <sub>2</sub> O equ. (acid soluble)		N/A																																								
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LABORATORY STOCK CEM I PORTLAND CEMENT ONLY		** % GGBS																																								
The stock CEM I Portland cement used in these tests was supplied by CEMENTOS TUDELA VEGUIN, S.A and the following results were obtained from that sample		Results of tests in accordance with BS EN 196-1 for 50% GGBS in combination with 50% CEM I Portland cement shown above																																								
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The GGBS contained no additional materials other than those permitted. The above results and other tests demonstrate the conformity of the material sold during the month to the requirements of EN 15167-1:2006.		The samples of LKAB Minerals GGBS and the CEM I Portland cement were bulk average monthly samples for the works specified																																								
LKAB Minerals Ltd are acting as a dispatching centre in the distribution of the above GGBS and further details and certification are available on request.																																										
		<b>0099/CPR/B34/0001</b>																																								

Signed:

L Bontoft - Technical Manager GGBS