Conformity Certificate

Regen Ground Granulated Blastfurnace Slag Produced at **Purfleet**
Sample Period **July 2021**

Certificate of Conformity of Regen GGBS

Spot samples of Regen GGBS were taken and tested to determine conformity to the autocontrol requirements of EN 15167-1 "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.

		Result	EN Limit
Regen GGBS Only			
Fineness m^2/kg		440	min. 275
Magnesia MgO %		8	max. 18
Sulfate SO^3 %		0.17	max. 2.5
Sulfide S^{2-} %		0.79	max. 2.0
Chloride Content Cl %		0.01	max. 0.1
Moisture Content %		0.06	max. 1.0
Aluminia Al_2O_3 %		14	
Note: If the value is ≥ 14% the '+SR' restriction will be exceeded if the C_3A of the CEM I is > 10%.			
Alkalis as Na2O equ. (acid soluble)			
Certified Average Alkali (Last 25) %		≤ 1.0	
Mean Alkali content (Last 25) %		0.49	
Declared Mean : Mean last 25 + (SD last 25 x 1.64) %		0.57	
Combination of 50% Laboratory Stock CEM I Portland Cement and 50% Regen GGBS			
Initial Setting Time min.		253	> 2 x PC
Activity Index %	7 days	61	min. 45
	28 days	82	min. 70
Laboratory Stock CEM I Portland Cement Only			
The laboratory stock CEM I Portland cement used in these tests was supplied by Hanson.			
Initial Setting Time min		168	
Compressive Strength N/mm^2	7 days	48.3	
	28 days	60.2	
The Regen 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.			

Hanson Cement has used all reasonable care to ensure the information herein contained is accurate but to the extent permitted in law, no liability can be accepted by Hanson Cement for any loss, damage, cost or expense arising from any inaccuracy, whether due to negligence or otherwise.

Signed:

N. Cardinal

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