

## **Conformity Certificate**



## Regen Ground Granulated Blastfurnace Slag Produced at Sample Period

## Teesside January 2023

## **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 m²/kg		501	min. 275
Magnesia MgO %		7	max. 18
Sulfate SO <sup>3</sup> %		0.20	max. 2.5
Sulfide S <sup>2-</sup> %		0.72	max. 2.0
Chloride Content Cl %		0.01	max. 0.1
Moisture Content %		0.14	max. 1.0
Aluminia Al <sub>2</sub> O <sub>3</sub> %		14	
Note: If the value is $\ge$ 14% the '+SR' restriction will be exceeded if the C <sub>3</sub> A of the CEM I is > 10%.			
Alkalis as Na2O equ. (acid soluble)			
Certified Average Alkali (Last 25) %		≤ 1.0	
Mean Alkali content (Last 25) %		0.52	
Declared Mean : Mean last 25 + (SD last 25 x 1.64) %		0.61	
Combination of 50% Laboratory Stock CEM I Portland Cement ar	nd 50% Reg	en GGBS	
Initial Setting Time min.		227	> 2 x PC
Activity Index %	7 days	74	min. 45
	28 days	90	min. 70
Laboratory Stock CEM I Portland Cement Onl	у		
The laboratory stock CEM I Portland cement used in these tests was supplied by Hanson.			
Initial Setting Time min		130	
Compressive Strength N/mm <sup>2</sup>	7 days	50.0	
	28 days	61.9	
The Regen GGBS contained no additional materials other than those permitted.	The above re	esults and c	ther tests
demonstrate the conformity of the material sold during the month to the real			
Hanson Cement has used all reasonable care to ensure the information herein contained is accurate to can be accepted by Hanson Cement for any loss, damage, cost or expense arising from any inaccurate			
Signed:	o, monor duc		
D. Cerdial			UK CA
Dr Nina Cardinal, Dipl.Ing., CEng, MiMMM National Technical Manager		1333	3-CPR-00212