

Conformity Certificate



Regen Ground Granulated Blastfurnace Slag Produced at Sample Period

Teesside SF August 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 | | 475 | min. 275 |
| Magnesia MgO % | | 7 | max. 18 |
| Sulfate SO ³ % | | 0.13 | max. 2.5 |
| Sulfide S ²⁻ % | | 0.63 | max. 2.0 |
| Chloride Content Cl % | | 0.01 | max. 0.1 |
| Moisture Content % | | 0.12 | max. 1.0 |
| Aluminia Al ₂ O ₃ % | | 14 | |
| Note: If the value is \ge 14% the '+SR' restriction will be exceeded if the C ₃ A | of the CEM I is > 10% | 6. | |
| Alkalis as Na2O equ. (acid solu | ıble) | | |
| Certified Average Alkali (Last 25) % | | ≤ 1.0 | |
| Mean Alkali content (Last 25) % | | 0.47 | |
| Declared Mean : Mean last 25 + (SD last 25 x 1.64) % | | 0.54 | |
| Combination of 50% Laboratory Stock CEM I Portland Co | ement and 50% Rege | en GGBS | |
| Initial Setting Time min. | | 266 | > 2 x PC |
| Activity Index % | 7 days | 70 | min. 45 |
| | 28 days | 90 | min. 70 |
| Laboratory Stock CEM I Portland Cer | ment Only | • | • |
| The laboratory stock CEM I Portland cement used in these to | tests was supplied by | Hanson. | |
| Initial Setting Time min | | 170 | |
| Compressive Strength N/mm ² | 7 days | 47.3 | |
| | 28 days | 59.5 | |
| The Regen GGBS contained no additional materials other than those pe | ermitted. The above re | esults and o | ther tests |

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:

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