

Conformity Certificate



Regen Ground Granulated Blastfurnace Slag Produced at Sample Period

Port Talbot December 2024

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 | | 503 | min. 275 |
| Magnesia MgO % | | 8 | max. 18 |
| Sulfate SO ³ % | | 0.54 | max. 2.5 |
| Sulfide S ²⁻ % | | 1.16 | max. 2.0 |
| Chloride Content Cl % | | 0.01 | max. 0.1 |
| Moisture Content % | | 0.28 | max. 1.0 |
| Aluminia Al ₂ O ₃ % | | 13 | |
| Note: If the value is \ge 14% the '+SR' restriction will be exceeded if the (| C_3A of the CEM I is > 109 | %. | |
| Alkalis as Na2O equ. (acid s | oluble) | | |
| Certified Average Alkali (Last 25) % | | ≤ 1.0 | |
| Mean Alkali content (Last 25) % | | 0.64 | |
| Declared Mean : Mean last 25 + (SD last 25 x 1.64) % | | 0.69 | |
| Combination of 50% Laboratory Stock CEM I Portland | d Cement and 50% Reg | en GGBS | |
| Initial Setting Time min. | | 288 | > 2 x PC |
| Activity Index % | 7 days | 64 | min. 45 |
| | 28 days | 82 | min. 70 |
| Laboratory Stock CEM Portland | Cement Only | | |
| The laboratory stock CEM I Portland cement used in these tests | was supplied by Heidelb | erg Materia | ls UK. |
| Initial Setting Time min | | 150 | |
| Compressive Strength N/mm ² | 7 days | 46.0 | |
| | 28 days | 59.4 | |
| The Regen GGBS contained no additional materials other than those demonstrate the conformity of the material sold during the mo | | | |
| liability can be accepted by Heidelberg Materials UK for any loss, damage, cost or exper | | | |
| Signed: | | | שוו |
| 1) Cerdial | | | UK CA |
| Dr Nina Cardinal, Dipl.Ing., CEng, MICT National Technical Manager | | 1333 | 3-CPR-00134 |