

## Cement Test Certificate

Ref: AYCC/QC/Spec/EN/MC/22.5/ 05

Brand Name: Hadhramout Cement

Manufacturing Date: (01-31)/05/2026

Type: Masonry Cement

Date of Issue: 18/06/2026

Code: MC 22.5 X – BS EN 413-1:2011

| Chemical Tests                                   | Unite | Typical Analysis | Standard Requirements |      |
|--------------------------------------------------|-------|------------------|-----------------------|------|
|                                                  |       |                  | Min.                  | Max. |
| Silicon dioxide (SiO <sub>2</sub> )              | %     | 28.40            | -                     | -    |
| Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> ) | %     | 9.40             | -                     | -    |
| Ferric Oxide (Fe <sub>2</sub> O <sub>3</sub> )   | %     | 8.75             | -                     | -    |
| Calcium Oxide (CaO)                              | %     | >42.00           | -                     | -    |
| Magnesium Oxide (MgO)                            | %     | <3.90            | -                     | -    |
| Potassium Oxide (K <sub>2</sub> O)               | %     | <0.65            | -                     | -    |
| Sodium Oxide (Na <sub>2</sub> O)                 | %     | <1.75            | -                     | -    |
| Sulphuric anhydride (SO <sub>3</sub> )           | %     | 2.15             | -                     | 3.50 |
| Chloride (Cl)                                    | %     | <0.03            | -                     | 0.10 |
| Loss on Ignition (L.O.I.)                        | %     | < 6.35           | -                     | -    |
| Insoluble Residue (I.R.(KOH))                    | %     | < 7.55           | -                     | -    |
| Tricalcium Aluminate (C <sub>3</sub> A)          | %     | 10.11            | -                     | -    |
| Tetracalciumaluminoferrite (C <sub>4</sub> AF)   | %     | 26.63            | -                     | -    |

| Physical Tests             | Unite        | Typical Analysis   | Standard Requirements |             |
|----------------------------|--------------|--------------------|-----------------------|-------------|
|                            |              |                    | Min.                  | Max.        |
| Fineness, Specific surface | Blaine       | M <sup>2</sup> /kg | ≥ 450                 | -           |
| Setting Time               | Initial      | Minutes            | ≤ 170                 | 60          |
|                            | Final        | Minutes            | ≤ 250                 | -           |
| Soundness                  | Le Chatelier | mm                 | ≤ 1.0                 | 10          |
| Compressive Strength       | 2 Days       | MPa                | ≥ 5.0                 | -           |
|                            | 7 Days       | MPa                | ≥ 11.0                | 10          |
|                            | 28 Days      | MPa                | 24±1                  | 22.50 42.50 |

The cement conforms to all the requirements of Masonry Cement MC 22.5X in accordance with BS EN 413-1:2011 at the time of dispatch.



Quality Control Manager