

IS 1489 (Part-1): 2015



CM/L 1209132

ACC

ACC Limited
Wadi Cement Works

WORK TEST CERTIFICATE

IS / ISO 9001



QMS

Portland Pozzolana Cement

| Despatched during Week No. | 40 | From | 01/10/18 | To | 07/10/18 |
|------------------------------------|--|------------------|--|------------------|----------|
| Test Certificate No. | 40 | Reference No. | | WCW/IMS/QA/FM/09 | |
| Dated | 05/11/18 | | | | |
| S.N. | Parameters | Results Obtained | Requirement as per IS 1489 (Part I) : 2015 | | |
| 1 | Chemical Composition | | | | |
| | Loss on Ignition (% by mass) | 2.10 | Not More than 5.0 % | | |
| | Magnesia (% by mass) | 0.80 | Not more than 6.0 % | | |
| | Sulphuric Anhydride SO ₃ (% by mass) | 2.90 | Not More than 3.5 % | | |
| | Chloride Content (% by mass) | 0.02 | Not more than 0.1 % for general purpose & not more than 0.05 % for pre-stressed structures | | |
| | Insoluble Residue (% by mass) | 26.10 | Not More than $[X + 4.0 (100-X) / 100]$ & Not less than (0.6 X), Where "X" is the declared Pozzolana content in cement | | |
| Physical Analysis | | | | | |
| 2 | Fineness | | | | |
| | Blaine's Specific Surface Area (m ² / kg) | 341 | Not Less than 300 | | |
| 3 | Compressive Strength (MPa) | | | | |
| | 72 ± 1h (3 Days) | 27.9 | Not less than 16.0 | | |
| | 168 ± 2h (7 Days) | 37.8 | Not less than 22.0 | | |
| | 672 ± 4h (28 Days) * | 55.5 | Not less than 33.0 | | |
| 4 | Setting Time (Minutes) | | | | |
| | Initial | 145 | Not less than 30 | | |
| | Final | 210 | Not more than 600 | | |
| 5 | Soundness | | | | |
| | Le-Chatelier Expansion (mm) | 1.00 | Not more than 10.0 | | |
| | Auto-Clave Expansion (%) | 0.030 | Not more than 0.8 | | |
| 6 | Drying Shrinkage (%)* | Awaited | Not more than 0.15 | | |
| 7 | Normal Consistency (%) | 31.00 | | | |
| | Temp. During Testing (°C) | 27.00 | (27 ± 2)°C | | |
| * Fly Ash Content in Cement is (%) | | | | | 30.00 |

The above cement complies with the requirements of IS 1489 (Part I): 2015 for Portland Pozzolana Cement.

Manager (QA)

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