





DASTAN, PALSANA, DIST. SURAT (GUJ.)

LICENCE NO. CM/L-7200051996

## **TEST CERTIFICATE**

Customer Name & Address: Marketing Department of JK Lakshmi Cement Ltd., Surat

Sample Identification : Ordinary Portland Cement – 53 Grade (As per IS 269 : 2015)

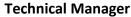
Sample Date: 22.01.2019 to 28.01.2019 (Week No: 04)

Certificate (ULR) No.: TC801318000000133P

Date of Issue: 06.02.2019

| Sr.<br>No | Particulars   | Test Method                  | Requirement of IS:269                                    | Results<br>Obtained           |
|-----------|---|------------------------------|--|-------------------------------|
|           | Chem  | ical Requirements            | 5  |                               |
| 1         | Ratio of Percentage of Lime to percentage of silica, alumina and iron oxide  CaO – 0.7SO <sub>3</sub>                 | IS : 4032 - 1985             | Not greater than 1.02<br>And not less than 0.80          | 0.890                         |
|           | 2.8 SiO <sub>2</sub> + 1.2 Al <sub>2</sub> O <sub>3</sub> + 0.65 Fe <sub>2</sub> O <sub>3</sub>                       |                              |  |                               |
| 2         | Ratio of percentage of alumina to that of iron oxide  | IS : 4032 - 1985             | Not less than 0.66                                       | 1.56                          |
| 3         | Insoluble residue(% by mass)  | IS : 4032 - 1985             | Not more than 5.0  | 1.82                          |
| 4         | Magnesia(% by mass)   | IS : 4032 - 1985             | Not more than 6.0  | 2.48                          |
| 5         | Total sulphur calculated as Sulphuric<br>Anhydride (SO₃) (% by mass)  | IS : 4032 - 1985             | Not more than 3.5  | 2.95                          |
| 6         | Total loss on ignition (% by mass)  | IS : 4032 - 1985             | Not more than 4.0  | 1.63                          |
| 7         | Chloride(% by mass)*  | IS : 4032 - 1985             | Not more than 0.1  | 0.021                         |
|           | Mech  | anical Requirement           | s  |                               |
| 1         | Fineness (m²/kg)  | IS : 4031<br>(Part-2) - 1999 | Not less than 225  | 332                           |
| 2         | Normal Consistency (%)  | IS : 4031<br>(Part-4) - 1988 | -  | 28.00                         |
| 3         | Soundness : a) Le-chateliere expansion (mm) b) Autoclave test expansion (%)   | IS : 4031<br>(Part-3) - 1988 | Not more than 10<br>Not more than 0.8                    | 1.0<br>0.086                  |
| 4         | Setting Time: a) Initial setting time (Minutes) b) Final setting time (Minutes)                                       | IS : 4031<br>(Part-5) - 1988 | Not less than 30<br>Not more than 600                    | 130<br>175                    |
| 5         | Compressive Strength: a) 72 ± 1 Hours (3 Days) (MPa) b) 168 ± 2 Hours (7 Days) (MPa) c) 672 ± 4 Hours (28 Days) (MPa) | IS : 4031<br>(Part-6) - 1988 | Not less than 27<br>Not less than 37<br>Not less than 53 | 38.2<br>47.7<br>Under Testing |

Remarks: Results reported above are the average test results of all sample testing during the relevant week.







Authorized Signatory





<sup>\*:</sup> Not covered under NABL Accreditation at present.