

## WHITE CEMENT – TECHNICAL SPECIFICATION

### CHEMICAL

| No. | PARAMETERS                                           | BIS SPECIFICATION (IS 8042:2015) |
|-----|------------------------------------------------------|----------------------------------|
| 1   | Loss on ignition<br>1.5–2.8                          | Max. 7.0                         |
| 2   | Iron Oxide %<br>0.2–0.26                             | Max. 1.0%                        |
| 3   | Total sulphur contents as SO <sub>3</sub><br>2.8–3.3 | Max. 3.5%                        |
| 4   | Magnesium oxide %<br>0.40–0.72                       | Max. 6%                          |
| 5   | Chloride Content %<br>0.02–0.04                      | Max. 0.1                         |
| 6   | Lime Saturation Factor<br>0.93–0.98                  | 0.66–1.02                        |
| 7   | Insoluble Residue %<br><0.3                          | Max. 4.0                         |

### PHYSICAL

| No. | PARAMETERS                                                                     | BIS SPECIFICATION (IS 8042:2015)                       |
|-----|--------------------------------------------------------------------------------|--------------------------------------------------------|
| 1   | Fineness (m <sup>2</sup> /Kg)<br>350–400                                       | 225 Min.                                               |
| 2   | Setting time (minutes)<br>Initial: 65–85<br>Final: 95–115                      | Initial: 30 Min.<br>Final: 600 Max.                    |
| 3   | Soundness:<br>Le Chatelier (mm): 1mm<br>Autoclave (%): Nil                     | Le Chatelier: 10 Max.<br>Autoclave: 0.8 Max.           |
| 4   | Whiteness (%)<br>88–92                                                         | 70 Min.                                                |
| 5   | Compressive strength (Mpa)<br>3 days: 34–42<br>7 days: 44–50<br>28 days: 54–62 | 3 days: 16 Min.<br>7 days: 22 Min.<br>28 days: 33 Min. |