

**HEIDELBERGCEMENT INDIA LTD, AMMASANDRA**  
**TEST REPORT FOR MYCEM**

REF.: HCIL/QA/2021/5

DATE : 04.03.2021

HCIL(AMS)-QCD-F026

WEEK NO. : 5

1/29/2021 to 2/4/2021

CHARACTERISTIC	RESULTS OBTAINED	REQUIREMENT OF IS455:2015
<b>(A) CHEMICAL COMPOSITION</b>		
(i) Magnesia (MgO), % by mass	4.85	10.0 Maximum
(ii) Insoluble Residue, % by mass	0.80	4.0 Maximum
(iii) Sulphuric Anhydride (SO <sub>3</sub> ) % by mass	2.36	3.5 Maximum
(iv) Sulphide Sulphur (S)	0.33	1.5 Maximum
(v) Loss on Ignition % by mass	2.14	5.0 Maximum
(vi) Total Chloride (Cl), % by mass	0.0426	0.10 Maximum
<b>(B) PHYSICAL TESTING</b>		
<b>1. Fineness of Cement</b>		
Sp.Surface blaine (m <sup>2</sup> /Kg)	318	225 m <sup>2</sup> /kg minimum
<b>2. Soundness</b>		
Le-Chatelier Expansion (mm)	2.0	10 mm Maximum
Autoclave Expansion (%)	0.14	0.8 % Maximum
<b>3. Setting Time</b>		
Initial (in Minutes)	120	Not less than 30 minutes
Final (in Minutes)	225	Not more than 600 minutes
<b>4. Compressive Strength (MPa)</b>		
(a) At 72 ± 1 Hrs.	22.2	16 MPa Minimum
(b) At 168 ± 2 Hrs.	32.4	22 MPa Minimum
(c) At 672 ± 4 Hrs.	51.2	33 MPa Minimum

**Remarks :**

- Physical Lab Temperature during testing - 27 ± 2° C
- Portland Slag Cement conforms to the requirement of **IS 455:2015** in all respects.



Mgr (QC)