



Capitol Cement
 11551 Nacogdoches Rd.
 San Antonio, TX 78217

Type I L (10) Cement Ecoment Spec

Date: April 11, 2024

Production Period:

Beginning March 1, 2024

Ending March 31, 2024

| CHEMICAL | | | PHYSICAL | | |
|------------------------|---------------------|-----------------|----------------------------------|--------------------------|--------------|
| Item | Spec. Limit | Test Result | Item | Spec. Limit | Test Result |
| SiO2 (%) | | <u>19.5</u> | Air Content of Mortar (volume %) | <i>12 max</i> | <u>8.2</u> |
| Al2O3 (%) | | <u>5.4</u> | Blaine Fineness (m2/kg) | <i>A</i> | <u>431</u> |
| Fe2O3 (%) | | <u>1.8</u> | ASTM C1038 | <i>0.020%</i> | <u>0.005</u> |
| CaO (%) | | <u>67</u> | Density | | <u>3.03</u> |
| MgO (%) | | <u>1.0</u> | Time of Setting (minutes) | | |
| SO3 (%) | <i>3.0% max (b)</i> | <u>4.1</u> | Vicat, Initial | <i>Not less than 45</i> | <u>83</u> |
| Na2O (%) | <i>A</i> | <u>0.08</u> | Vicat, Final | <i>Not more than 420</i> | <u>241</u> |
| K2O (%) | <i>A</i> | <u>0.55</u> | Compressive Strength | | |
| Equivalent alkalis (%) | | <u>0.45</u> | 1 Day (psi) | <i>A</i> | <u>2,300</u> |
| | <i>minimum</i> | <u>0.41</u> | 3 Day (psi) | <i>minimum (1890)</i> | <u>4,200</u> |
| | <i>maximum</i> | <u>0.48</u> | 7 Day (psi) | <i>minimum (2900)</i> | <u>5,100</u> |
| Ignition Loss (%) | <i>10% max</i> | <u>6.5</u> | 28 Day (psi) (Feb) | <i>minimum (3620)</i> | <u>5,870</u> |
| Class F Fly Ash (%) | | <u> </u> | | | |
| CaO % in Ash | <i>A</i> | <u> </u> | | | |
| Limestone (%) | <i>10% +/- 2.5%</i> | <u>11.17</u> | | | |
| CO2 (%) | | <u>4.71</u> | | | |
| CaCO3 in Limestone (%) | | <u>90</u> | | | |

(A) Not Applicable; (b) It is permissible to exceed the limit for SO3, provided it has been demonstrated by Test Method C-1038 that the cement will not develop expansion exceeding 0.020% at 14 days.

We certify that the above cement, at the time of shipment meets the chemical and physical requirements of the current ASTM C 595, C 1012, C 227 specifications. The above data represents the averages of representative samples from production.

Douglas Conroy, Chief Chemist