



Capitol Cement  
 11551 Nacogdoches Rd.  
 San Antonio, TX 78217

Ecoment Endure - Type IP (25) (HS) Cement

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
SiO <sub>2</sub> (%)	A	<u>30.6</u>	Air Content of Mortar (volume %)	12 max	<u>4.2</u>
Al <sub>2</sub> O <sub>3</sub> (%)	A	<u>9.6</u>	Blaine Fineness (m <sup>2</sup> /kg)	A	<u>415</u>
Fe <sub>2</sub> O <sub>3</sub> (%)	A	<u>2.4</u>	ASTM C1038		
CaO (%)	A	<u>52</u>	Density		<u>2.85</u>
MgO (%)	6.0% max	<u>1.0</u>	Time of Setting (minutes)		
SO <sub>3</sub> (%)	4.0% max	<u>3.0</u>	Vicat, Initial	Not less than 45	<u>82</u>
Na <sub>2</sub> O (%)	A	<u>0.38</u>	Vicat, Final	Not more than 420	<u>244</u>
K <sub>2</sub> O (%)	A	<u>0.83</u>	Compressive Strength		
Equivalent alkalis (%)	A	<u>0.93</u>	1 Day (psi)	A	<u>2,010</u>
	minimum	<u>0.70</u>	3 Day (psi)	minimum (1890)	<u>3,530</u>
	maximum	<u>1.08</u>	7 Day (psi)	minimum (2900)	<u>4,480</u>
Ignition Loss (%)	5.0%	<u>2.2</u>	28 Day (psi) (Feb)	minimum (3620)	<u>6,200</u>
Class F Fly Ash (%)		<u>22.40</u>			
CaO % in Ash		<u>1.85</u>			
Limestone (%)					
CO <sub>2</sub> (%)					
CaCO <sub>3</sub> in Limestone (%)					

(A) Not Applicable

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, specifications. The above data represents the averages of representative samples from production.

**Douglas Conroy, Chief Chemist**