



# Central Plains Cement Company

## Type IP (25) Mill Test Report

Month of Issue: Jul-17

Plant: Omaha Terminal  
Product: Type IP (25)  
Manufactured: May-17

The current version of ASTM C 595 and AASHTO M 240 Standard Requirements

CHEMICAL ANALYSIS			PHYSICAL ANALYSIS		
Item	Spec limit	Test Result	Item	Spec limit	Test Result
<i>Rapid Method, X-Ray (C 114)</i>					
SiO <sub>2</sub> (%)		26.8	Air content of mortar (%) (C 185)	12 max	8
Al <sub>2</sub> O <sub>3</sub> (%)		9.16	Blaine Fineness (m <sup>2</sup> /kg) (C 204)	---	352
Fe <sub>2</sub> O <sub>3</sub> (%)		7.31	Fineness, Residue retained on a 45 um sieve (%)	---	7.7
CaO (%)		48.82	Autoclave expansion (%) (C 151)	0.80 max -0.20 min	-0.03
MgO (%)	6.0 max	1.1	Compressive strength (PSI) (C 109)		
Sulphate as SO <sub>3</sub> (%)	4.0 max	2.6	1 days		1630
Loss on ignition (%)	5.0 max	2.4	3 days	1890 min	2800
Total Alkalis	---	0.92	7 days	2900 min	3790
			28 days (Reflects previous period data)	3620 min	5640
			Time of setting (minutes)		
			Vicat Initial (C 191)	45 - 420	138
			Specific Gravity (C188)	---	3.04

We certify that the above described cement meets the chemical and physical requirements of the current version of ASTM C 595 and AASHTO M 240.

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Certified By:

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7/11/2017