



Central Plains Cement Company

Type IS (40) Mill Test Report

Month of Issue: Jul-18

Plant: Sugar Creek Plant
 Product: Type IS (40)
 Manufactured: May-18

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
Rapid Method, X-Ray (C 114)			Air content of mortar (%) (C 185)	12 max	9
SiO ₂ (%)	---	27.3	Blaine Fineness (m ² /kg) (C 204)	---	452
Al ₂ O ₃ (%)	---	6.0	Fineness, Residue retained on a 45 um sieve (%)	---	2.4
Fe ₂ O ₃ (%)	---	2.1	Autoclave expansion (%) (C 151)	0.80 max -0.20 min	0.02
CaO (%)	---	54.3	Compressive strength (PSI) (C 109)		
MgO (%)	6.0 max	4.6	1 days		1330
Sulfur as SO ₃ (%)	3.0 max*	3.0	3 days	1890 min	2820
Sulfur as Sulfide (%)	2.0 max	0.41	7 days	2900 min	4460
Loss on ignition (%)**	3.0 max	2.4	28 days	3620 min	7170
Insoluble residue (%)	1.0 max	0.21	Time of setting (minutes)		
Total Alkalis	---	0.55	Vicat Initial (C191)	45 - 420	135
			Mortar Bar Expansion (%) (C 1038)*	.02 max	0.006

* May exceed 3.0% SO₃ maximum based on our C 1038 results of <0.02% expansion at 14 days.

** Corrected for loss in S² at 950 °C for 15 min.

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.

Sugar Creek Plant
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 816-257-3604

Certified By:

Paul Engel - Quality Coordinator

7/10/2018