



Central Plains Cement Company

Type IP (7) Mill Test Report

Month of Issue: Aug-14

Plant: Sugar Creek Plant
 Product: Type IP (7), GU
 Shipped: Jul-14
 Manufactured: Dec-13

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

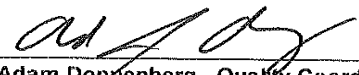
CHEMICAL ANALYSIS			PHYSICAL ANALYSIS		
Item	Spec limit	Test Result	Item	Spec limit	Test Result
Rapid Method, X-Ray (C 114)			Air content of mortar (%) (C 185)	12 max	9
SiO ₂ (%)	---	24.6	Blaine Fineness (m ² /kg) (C 204)	---	384
Al ₂ O ₃ (%)	---	4.5	-325 (%) (C 430)	---	92.0
Fe ₂ O ₃ (%)	---	2.9	Autoclave expansion (%) (C 151)	0.80 max -0.20 min	-0.03
CaO (%)	---	60.1	Compressive strength (MPa, PSI) (C 109)		
MgO (%)	6.0 max	1.1	1 days	---	15.9 [2310]
Sulphate as SO ₃ (%)	4.0 max*	2.7	3 days	13.0 (1890) min	30.1 [4360]
Loss on ignition (%)	5.0 max	2.7	7 days	20.0 (2900) min	38.8 [5630]
Total Alkalis	---	0.53	28 days (Reflects previous month's data)	25.0 (3620) min	56.4 [8170]
			Time of setting (minutes)		
			Vicat Initial (C 191)	45 - 420	101
			Sulfate Expansion (%) (C 1038)	0.020 max	0.003
			% Pozzolan Addition Rate		6.4
			Specific Gravity (C188)	---	3.05

* May exceed 4.0% SO₃ maximum if the C-265 test result is not greater than 0.5 g/L.

We certify that the above described cement meets the chemical and physical requirements of the current version of CSA A3000, ASTM C 595, and AASHTO M 240. This product meets the requirements of MODOT Type SF blended cement, with alkali levels which may exceed 0.70%.

Sugar Creek Plant
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 816-257-3608

Certified By:


 Adam Doppenberg - Quality Coordinator

8/12/2014