



Mill Test Certificate Report - White Cement

Type: I per ASTM C150
and AASHTO M85

Test Period: November-17

Certification

We certify the cement described here, at the time of shipment, meets chemical and physical requirements of the current ASTM C-150, and AASHTO M-85 specifications for Type I. We further certify that at the time of shipment it meets the ASTM C-150 Optional Requirement^C for low alkali cement having less than 0.6% Equivalent Alkalies (Na₂O + 0.658K₂O). We are not responsible for improper use or workmanship.

General Information

Supplier: Lehigh White Cement Company

Source Location: Waco Plant

Address: 100 S. Wickson Rd.
WACO, TX 76712
254-776-7162

Consignee:
Address:

Test Data on ASTM "Standard" Requirements and Results

Chemical and Physical Requirements and Results of Tests

Item	Unit	Limit	Results	Item	Unit	Limit	Results
SiO ₂	%	A	21.6	Fineness:			
Al ₂ O ₃	%	A	4.4	Passing 45µm (No. 325)	%	A	98.2
Fe ₂ O ₃	%	A	0.3	Blaine Fineness	m ² /kg	260 min	439
CaO	%	A	65.7				
MgO	%	6.0 max	0.9	Autoclave Expansion	%	0.80 max	0.02
SO ₃	%	3.5 max ^B	4.0				
Equivalent Alkalies	%	0.60 max ^C	0.20	Air Content	%	12 max	6
Loss on Ignition	%	3.5 max	2.7				
Insoluble Residue	%	1.5 max	0.24	Time of setting by Vicat needle			
Free Lime	%	A	1.8	Initial Set Time	minutes	45 min	61
CO ₂	%	A	1.6	Initial Set Time	minutes	375 max	
Limestone	%	5.0 max	3.5	Final Set Time	minutes	A	
CaCO ₃ in Limestone	%	70 min	96				
Potential Compounds:				Compressive Strengths			
C ₃ S	%	A	61.7	1-Day	MPa ^D	MPa ^D	PSI
C ₂ S	%	A	15.3	3-Day	12.0 min	32.3	4,684
C ₃ A	%	A	11.3	7-Day	19.0 min	41.6	6,032
C ₄ AF	%	A	0.8	28-Day ^E	A	54.4	7,888

^A Not Applicable.

^B Permissible to exceed SO₃ limit provided ASTM C1038 testing demonstrates expansion in water will not exceed 0.020 % at 14 days.

^C Optional Limit for Equivalent Alkalies (Na₂O + 0.658K₂O) %

^D 1 MPa = 145 psi

^E From Previous Month

December 4, 2017

Date

Donald Goforth

Quality Control Supervisor