

LEHIGH

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CEMENT TEST REPORT

Cement: ASTM C150-09 Type III, Low Alkali

Date Shipped: April 2012

Report Date: 5/16/2012

Lot #: 1293

Destination:

STANDARD CHEMICAL REQUIREMENTS ASTM C 114	TEST RESULTS	ASTM C150 TYPE III
Silicon Dioxide (SiO ₂), %	20.4	----
Aluminum Oxide (Al ₂ O ₃), %	4.4	----
Ferric Oxide (Fe ₂ O ₃), %	4.0	----
Calcium Oxide (CaO), %	64.7	----
Magnesium Oxide (MgO), %	1.4	6.0 Max
Sulfur Trioxide (SO ₃), %	3.3	3.5 Max
Loss on Ignition (LOI), %	1.6	3.0 Max
Insoluble Residue, %	0.24	0.75 Max
Alkalies (Na ₂ O equivalent), %	0.37	0.60 Max
Tricalcium Silicate (C ₃ S), % ^a	64	----
Dicalcium Silicate (C ₂ S), % ^a	10	----
Tricalcium Aluminate (C ₃ A), % ^a	5	15 Max
Tetracalcium Aluminoferrite (C ₄ AF), % ^a	12	----
PHYSICAL REQUIREMENTS		
(ASTM C 204) Blaine Fineness, m ² /gm	611	----
(ASTM C 430) -325 Mesh, %	99.9	----
(ASTM C 114) Limestone, %	0.0	5 Max
(ASTM C 191) Time of Setting - Initial (Vicat)	49	45 Min
(ASTM C 191) Time of Setting - Final (Vicat)	115	----
(ASTM C 451) False Set, %	68	50 Min
(ASTM C 185) Air Content, %	8.0	12 Max
(ASTM C 151) Autoclave Expansion, %	0	0.80 Max
(ASTM C 187) Normal Consistency, %	29.8	----
(ASTM C 109) Compressive Strength, psi (MPa)		
1 Day	3518 (24.2)	1740 (12.0) Min
3 Day	4985 (34.3)	3480 (24.0) Min
7 Day	5851 (40.3)	----
28 Day (Previous Month)	7085 (48.8)	----

This cement meets the requirements of specification:

ASTM C150-09 Type III, Low Alkali
 AASHTO M85 - Type I

ASTM C 1157 Portland Cement Type HE (MS)

^a Adjusted per ASTM C-150-09 Section A1.6

Albert J. Cornibe
 Quality Manager