



3250 Linebaugh Rd.
 Xenia, OH 45385
 Telephone (800) 762-0040
 FAX (937) 306-4110

**CEMENT
MILL
TEST
REPORT**

Cement Identified as: C595 IL (10) **Date:** 12/1/2017

Production Period: October, 2017 **Silo:** 6

STANDARD CHEMICAL REQUIREMENTS (ASTM C 114)	SPECIFICATION	ASTM C595 IL (10)	RESULTS
Silicon Dioxide (SiO ₂), %		-----	17.6
Aluminum Oxide (Al ₂ O ₃), %		-----	4.4
Ferric Oxide (Fe ₂ O ₃), %		-----	3.1
Calcium Oxide (CaO), %		-----	61.2
Magnesium Oxide (MgO), %		-----	4.8
Sulfur Trioxide (SO ₃), % ^A	Maximum	3.0	4.0
Loss on Ignition (LOI), %	Maximum	10.0	4.6
Alkalies (Na ₂ O equivalent), %		-----	0.88
Tricalcium Silicate (C ₃ S), Potential %		-----	70
Dicalcium Silicate (C ₂ S), Potential %		-----	0
Tricalcium Aluminate (C ₃ A), Potential %		-----	6
Tetracalcium Aluminoferrite (C ₄ AF), Potential %		-----	10
PHYSICAL REQUIREMENTS			
(ASTM C 204) Blaine Fineness, m ² /kg		-----	5850
(ASTM C 430) 45-um sieve, % passing			99.6
(ASTM C 191) Time of Setting (Vicat)			
Initial Set, minutes	Minimum	45	69
Final Set, minutes	Maximum	420	160
(ASTM C 185) Air Content, %	Maximum	12	9.4
(ASTM C 151) Autoclave Expansion, %	Maximum	0.80	0.15
(ASTM C 1038) Expansion in Water, %	Maximum	0.02	0.007
(ASTM C 187) Normal Consistency, %		-----	29.2
(ASTM C 109) Compressive Strength, psi (Mpa)			
1 Day		-----	3990 (27.5)
3 Day	Minimum	1890 (13.0)	5000 (34.5)
7 Day	Minimum	2900 (20.0)	5480 (37.8)
28 Day	Minimum	3620 (25.0)	6260 (43.2)

^A Per ASTM C563 and ASTM C1038 testing

We certify that this cement conforms to all of the standard requirements for portland cement in the above specification for the type specified.

By: Rusty Strader

Physical Testing completed by: CC, MS
 Chemical Testing completed by: TA, NC, JC, NM

Rusty Strader
 Quality Control Manager
 Fairborn Cement Company