



MANUFACTURERS OF PORTLAND CEMENTS

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SINCE 1908

449 1200 STREET
P.O. BOX 1000
HUMBOLDT, KANSAS 66748-0900

CERTIFIED MILL TEST REPORT-Result on tests on typical samples-Monarch Masonry Cement Type-S

Date of Shipment
Consigned to

From Humboldt
Car or Trailer

Destination

| | ASTM C91 | MONARCH |
|---|-----------------|----------------|
| Fineness, residue on No. 325 sieve (45 micron) Maximum % | 24 | 1.5 |
| Autoclave Expansion - - Maximum % | 1 | 0.005 |
| Time of Setting, Gillmore Initial set - Minimum hour | 1.5 | 2:15 |
| Final set - Maximum hour | 24 | 3:50 |
| Compressive Strength - - PSI Equal or higher: | | |
| 7 days | 1300 | 2150 |
| 28 days | 2100 | 2717 |
| Air Content of Mortar - - Minimum % | 8 | 15.4 |
| Maximum % | 19 | n/d |
| Water Retention - - Minimum % of original flow | 70 | 88.7 |

The cement in this shipment meets all of the requirements in the current specifications of the Federal Government and the American Society for Testing and Materials. All tests conform to ASTM Test Methods: Chemical C-114, Blaine C-204, Soundness C-151, Gillmore C-266, Compressive Strength C-109, Air Content C-185, and C91.

Date: 5/1/2008

Calvin D. Parker
Quality Control Supervisor