

LABORATORY REPORT

Expansion - ASTM C 827

Mix: 5 gallons water / sack of cement
1 lb Intrusion-Aid AW-91

Time (in mins)	Expansion %
5	+ 0.31
10	+ 0.38
15	+ 0.38
20	+ 0.34
25	+ 0.25
30	+ 0.19
35	+ 0.13
40	0.00
45	- 0.06
50	- 0.16
55	- 0.19
60 (1 hr)	- 0.25
70	- 0.31
80	- 0.31
90	- 0.22
100	+ 0.09
110	+ 0.31
120 (2 hr)	+ 0.47
130	+ 0.63
150	+ 0.81
160	+ 0.97
170	+ 1.09
180 (3 hr)	+ 1.19
190	+ 1.25
Before Final Set	+ 1.47

LABORATORY REPORT

Expansion and Bleeding - ASTM C 940

Mix: 5 gallons water / sack of cement
 1 lb Intrusion-Aid AW-91
 Flow: 13.7 seconds

Time (in mins)	Expansion %	Bleeding %
5	+ 0.12	0.00
10	+ 0.50	
15	+ 0.87	0.12
20	+ 1.00	
25	+ 1.25	
30	+ 1.25	0.37
35	+ 1.37	
40	1.62	
45	- 1.87	0.62
50	- 2.12	
55	- 2.24	
60 (1 hr)	- 2.24	0.87
75	- 2.37	
90	- 2.49	1.00
105	- 2.74	
120 (2 hr)	+ 3.12	1.37
135	+ 3.12	
150	+ 3.24	
180 (3 hr)	+ 3.24	1.50

LABORATORY REPORT

Setting Time / Compressive Strength

Mix: 4.5 gallons water / sack of cement
1 lb Intrusion-Aid AW-91

Setting Time - ASTM C 191

Initial 5.00 hours

Final 5.75 hours

Compressive Strength - ASTM C 109 (modified w/ 2x4 cylinders)

24 hour 3710 psi

7 days 6675 psi

28 days 8250 psi

LABORATORY REPORT

Setting Time / Compressive Strength

Mix: 5 gallons water / sack of cement
 1 lb Intrusion-Aid AW-91

Setting Time - ASTM C 191

Initial 5.25 hours

Final 6.00 hours

Compressive Strength - ASTM C 109 (modified w/ 2x4 cylinders)

24 hour 3120 psi

7 days 5535 psi

28 days 7370 psi