APPENDIX C: AIR-VOID ANALYSIS DATA

	Site Number													
	O	1	2	3	4A	4	12	19	22	26A	26B	27	28	29
raw data														
area analyzed (cm2)	151.46	94.9	151.56	70	86.01	94.9	90.47	69.385	156.87	69.85	87.6	74.2	152.64	100.20
								27						43
air stops	217	116	180	88	113	117	136	133	98	65	120	96	139	150
paste stops	732	304	734	349	264	294	471	466	302	368	389	336	239	429
aggregate stops	2006	921	2044	929	1055	921	1156	747	1154	913	1202	1011	1128	841
secondary ettringite stops	5	9	4	2	1	18	5	10	10	19	1	7	15	5
total stops	2960	1350	2962	1368	1433	1350	1768	1356	1564	1365	1712	1450	1521	1425
traverse length (mm)	7731.5	4133.7	7736.7	3573.2	4053.9	4133.7	4618.0	3541.9	5719.5	3565.4	4471.7	3787.4	5563.8	4363.4
# of air void intercepts	3728	1275	2376	892	1626	1318	1752	1066	1278	772	1496	1435	1819	1878
# of secondary ettringite filled intercepts	207	170	288	80	5	448	113	77	92	399	72	197	14	404
results														
vol% aggregate	67.8	68.2	69.0	67.9	73.6	68.2	65.4	55.1	73.8	66.9	70.2	69.7	74.2	59.0
vol% air original	7.5	9.3	6.2	6.6	8.0	10.0	8.0	10.5	6.9	6.2	7.1	7.1	10.1	10.9
vol% air existing	7.3	8.6	6.1	6.4	7.9	8.7	7.7	9.8	6.3	4.8	7.0	6.6	9.1	10.5
vol% paste original	24.7	22.5	24.8	25.5	18.4	21.8	26.6	34.4	19.3	27.0	22.7	23.2	15.7	30.1
vol% paste existing	24.9	23.2	24.9	25.7	18.5	23.1	26.9	35.1	19.9	28.4	22.8	23.7	16.7	30.5
original void frequency (voids/m)	509	350	344	272	402	427	404	323	240	328	351	431	329	523
existing void frequency (voids/m)	482	308	307	250	401	319	379	301	223	217	335	379	327	430
original avg. chord length (mm)	0.147	0.265	0.180	0.242	0.198	0.234	0.197	0.327	0.288	0.187	0.202	0.165	0.307	0.208
existing avg. chord length (mm)	0.152	0.279	0.198	0.258	0.197	0.272	0.203	0.326	0.280	0.220	0.210	0.175	0.280	0.245
original specific surface (mm-1)	27.1	15.1	22.2	16.5	20.2	17.1	20.3	12.2	13.9	21.3	19.8	24.3	13.0	19.2
existing specific surface (mm-1)	26.3	14.4	20.2	15.5	20.3	14.7	19.7	12.3	14.3	18.2	19.1	22.9	14.3	16.4
original paste/air ratio	3.3	2.4	4.0	3.9	2.3	2.2	3.3	3.3	2.8	4.4	3.2	3.3	1.6	2.8
existing paste/air ratio	3.4	2.7	4.1	4.0	2.3	2.7	3.5	3.6	3.2	6.0	3.3	3.6	1.8	2.9
original spacing factor (mm)	0.121	0.161	0.180	0.234	0.114	0.127	0.165	0.266	0.202	0.204	0.162	0.134	0.119	0.144
existing spacing factor (mm)	0.129	0.188	0.203	0.257	0.115	0.181	0.177	0.292	0.223	0.276	0.170	0.156	0.128	0.177