

ภาคผนวก ง
ตารางแสดงผลการทดสอบการหดตัวแบบแห้ง

ตารางที่ ง.1 การหดตัวแบบแห้งของคอนกรีต CON

Age (Days)	Li (in)		Lx (in)		Diff. Length (in)		Lx (mm)		Diff. Length (mm)		Shrinkage x10 ⁻⁶		Average
	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	
0	17.36	16.11	10.3264	10.3139	0.00000	0.00000	262.2908	261.9726	0.00000	0.00000	0	0	0
3	17.27	16.02	10.3254	10.3129	-0.00011	-0.00011	262.2641	261.9466	-0.00011	-0.00011	114	111	113
7	17.18	15.91	10.3244	10.3118	-0.00021	-0.00022	262.2406	261.9199	-0.00021	-0.00022	215	225	220
14	17.09	15.81	10.3237	10.3109	-0.00029	-0.00032	262.2222	261.8971	-0.00029	-0.00032	294	323	308
21	17.04	15.77	10.3232	10.3105	-0.00035	-0.00037	262.2095	261.8856	-0.00035	-0.00037	348	371	360
28	17.01	15.73	10.3228	10.3101	-0.00039	-0.00041	262.2000	261.8761	-0.00039	-0.00041	389	412	400
35	16.94	15.66	10.3223	10.3095	-0.00045	-0.00048	262.1866	261.8602	-0.00045	-0.00048	446	480	463
42	16.91	15.63	10.3220	10.3092	-0.00048	-0.00051	262.1777	261.8533	-0.00048	-0.00051	484	510	497
49	16.88	15.60	10.3216	10.3087	-0.00053	-0.00056	262.1676	261.8418	-0.00053	-0.00056	527	558	543
56	16.87	15.58	10.3213	10.3084	-0.00055	-0.00059	262.1619	261.8342	-0.00055	-0.00059	552	591	571
63	16.85	15.57	10.3212	10.3083	-0.00057	-0.00060	262.1581	261.8317	-0.00057	-0.00060	568	602	585
70	11.85	10.57	10.3212	10.3084	-0.00057	-0.00059	262.1574	261.8342	-0.00057	-0.00059	571	591	581
77	11.85	10.57	10.3211	10.3083	-0.00057	-0.00060	262.1568	261.8317	-0.00057	-0.00060	574	602	588
84	11.85	10.57	10.3211	10.3084	-0.00057	-0.00060	262.1568	261.8323	-0.00057	-0.00060	574	599	586
91	11.84	10.56	10.3211	10.3083	-0.00058	-0.00060	262.1555	261.8310	-0.00058	-0.00060	579	604	592
98	11.83	10.55	10.3210	10.3082	-0.00059	-0.00062	262.1536	261.8285	-0.00059	-0.00062	587	615	601

ตารางที่ ง.2 การหดตัวแบบแห้งของคอนกรีต CS

Age (Days)	Li (in)		Lx (in)		Diff. Length (in)		Lx (mm)		Diff. Length (mm)		Shrinkage x10 ⁻⁶		Average
	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	
0	21.70	12.68	10.3698	10.2795	0.00000	0.00000	263.3925	261.1002	0.00000	0.00000	0	0	0
3	21.56	12.56	10.3683	10.2783	-0.00016	-0.00014	263.3550	261.0684	-0.00016	-0.00014	158	135	147
7	21.46	12.44	10.3673	10.2771	-0.00027	-0.00027	263.3284	261.0379	-0.00027	-0.00027	271	265	268
14	21.39	12.35	10.3663	10.2759	-0.00037	-0.00039	263.3049	261.0087	-0.00037	-0.00039	370	390	380
21	16.30	7.33	10.3651	10.2754	-0.00051	-0.00045	263.2725	260.9954	-0.00051	-0.00045	506	447	477
28	16.22	7.25	10.3650	10.2753	-0.00051	-0.00046	263.2712	260.9922	-0.00051	-0.00046	512	461	486
35	16.18	7.22	10.3646	10.2750	-0.00056	-0.00049	263.2604	260.9852	-0.00056	-0.00049	557	490	524
42	16.16	7.21	10.3646	10.2750	-0.00055	-0.00049	263.2611	260.9846	-0.00055	-0.00049	555	493	524
49	16.14	7.17	10.3644	10.2746	-0.00058	-0.00054	263.2560	260.9744	-0.00058	-0.00054	576	536	556
56	16.12	7.16	10.3641	10.2745	-0.00061	-0.00054	263.2490	260.9732	-0.00060	-0.00054	606	542	574
63	16.11	7.14	10.3640	10.2743	-0.00062	-0.00057	263.2465	260.9662	-0.00062	-0.00057	616	572	594
70	16.10	7.13	10.3638	10.2742	-0.00064	-0.00058	263.2414	260.9636	-0.00064	-0.00058	638	582	610
77	16.08	7.11	10.3637	10.2740	-0.00066	-0.00060	263.2369	260.9585	-0.00066	-0.00060	656	604	630
84	16.06	7.10	10.3635	10.2739	-0.00068	-0.00061	263.2325	260.9566	-0.00068	-0.00061	675	612	644
91	16.06	7.10	10.3634	10.2739	-0.00068	-0.00061	263.2312	260.9566	-0.00068	-0.00061	681	612	646
98	16.05	7.10	10.3634	10.2739	-0.00069	-0.00062	263.2293	260.9560	-0.00069	-0.00062	689	615	652

ตารางที่ ง.3 การหดตัวแบบแห้งของคอนกรีต CS20

Age (Days)	Li (in)		Lx (in)		Diff. Length (in)		Lx (mm)		Diff. Length (mm)		Shrinkage x10 ⁻⁶		Average
	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	
0	19.34	12.99	10.3461	10.2826	0.00000	0.00000	262.7905	261.1783	0.00000	0.00000	0	0	0
3	19.21	12.86	10.3447	10.2813	-0.00015	-0.00014	262.7562	261.1446	-0.00015	-0.00014	145	143	144
7	19.16	12.76	10.3443	10.2803	-0.00020	-0.00025	262.7442	261.1198	-0.00020	-0.00025	196	248	222
14	19.04	12.68	10.3428	10.2793	-0.00035	-0.00036	262.7080	261.0944	-0.00035	-0.00036	349	357	353
21	14.02	7.64	10.3423	10.2785	-0.00041	-0.00045	262.6934	261.0735	-0.00041	-0.00045	411	446	428
28	13.92	7.53	10.3418	10.2780	-0.00046	-0.00050	262.6813	261.0614	-0.00046	-0.00050	462	497	480
35	13.91	7.50	10.3418	10.2778	-0.00046	-0.00052	262.6826	261.0557	-0.00046	-0.00052	457	521	489
42	13.88	7.48	10.3418	10.2777	-0.00046	-0.00053	262.6813	261.0544	-0.00046	-0.00053	462	527	494
49	13.84	7.47	10.3413	10.2775	-0.00052	-0.00055	262.6680	261.0494	-0.00052	-0.00055	519	548	533
56	13.83	7.45	10.3412	10.2775	-0.00052	-0.00056	262.6673	261.0474	-0.00052	-0.00056	521	556	539
63	13.80	7.42	10.3408	10.2771	-0.00056	-0.00059	262.6572	261.0386	-0.00056	-0.00059	564	594	579
70	13.77	7.41	10.3406	10.2770	-0.00059	-0.00061	262.6515	261.0347	-0.00059	-0.00061	589	610	599
77	13.76	7.40	10.3405	10.2769	-0.00060	-0.00062	262.6483	261.0335	-0.00060	-0.00062	602	616	609
84	13.74	7.39	10.3402	10.2768	-0.00063	-0.00063	262.6413	261.0309	-0.00063	-0.00063	632	627	629
91	13.74	7.39	10.3403	10.2768	-0.00063	-0.00063	262.6426	261.0297	-0.00063	-0.00063	626	632	629
98	13.73	7.38	10.3402	10.2767	-0.00063	-0.00064	262.6407	261.0278	-0.00063	-0.00064	634	640	637

ตารางที่ ง.4 การหดตัวแบบแห้งของคอนกรีต CS35

Age (Days)	Li (in)		Lx (in)		Diff. Length (in)		Lx (mm)		Diff. Length (mm)		Shrinkage x10 ⁻⁶		Average
	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	
0	19.73	16.42	10.3500	10.3170	0.00000	0.00000	262.8896	262.0507	0.00000	0.00000	0	0	0
3	19.57	16.27	10.3483	10.3153	-0.00018	-0.00018	262.8477	262.0095	-0.00018	-0.00018	177	176	177
7	19.50	16.22	10.3477	10.3148	-0.00025	-0.00023	262.8305	261.9968	-0.00025	-0.00023	250	230	240
14	19.41	16.13	10.3466	10.3138	-0.00037	-0.00035	262.8026	261.9695	-0.00037	-0.00035	368	347	357
21	16.88	13.58	10.3461	10.3132	-0.00042	-0.00041	262.7899	261.9542	-0.00042	-0.00041	422	412	417
28	14.26	10.97	10.3454	10.3125	-0.00049	-0.00048	262.7727	261.9377	-0.00049	-0.00048	494	482	488
35	14.26	10.96	10.3453	10.3123	-0.00050	-0.00050	262.7715	261.9326	-0.00050	-0.00050	500	504	502
42	14.23	10.95	10.3452	10.3124	-0.00052	-0.00050	262.7670	261.9345	-0.00052	-0.00050	518	496	507
49	14.20	10.93	10.3449	10.3122	-0.00055	-0.00052	262.7600	261.9295	-0.00055	-0.00052	548	517	533
56	14.18	10.90	10.3447	10.3118	-0.00057	-0.00056	262.7543	261.9206	-0.00057	-0.00056	572	555	564
63	14.15	10.88	10.3444	10.3118	-0.00060	-0.00056	262.7480	261.9187	-0.00060	-0.00056	599	563	581
70	14.15	10.86	10.3443	10.3115	-0.00061	-0.00060	262.7461	261.9110	-0.00061	-0.00060	607	596	602
77	14.13	10.85	10.3442	10.3114	-0.00062	-0.00061	262.7423	261.9085	-0.00062	-0.00061	623	607	615
84	14.12	10.83	10.3441	10.3112	-0.00064	-0.00063	262.7391	261.9034	-0.00064	-0.00063	637	628	633
91	14.12	10.83	10.3441	10.3112	-0.00064	-0.00063	262.7391	261.9034	-0.00064	-0.00063	637	628	633
98	14.12	10.83	10.3440	10.3113	-0.00064	-0.00062	262.7385	261.9060	-0.00064	-0.00062	639	618	628

ตารางที่ ๓.5 การหดตัวแบบแห้งของคอนกรีต CS50

Age (Days)	Li (in)		Lx (in)		Diff. Length (in)		Lx (mm)		Diff. Length (mm)		Shrinkage x10 ⁻⁶		Average
	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	
0	19.09	12.34	10.3435	10.2761	0.00000	0.00000	262.7258	261.0125	0.00000	0.00000	0	0	0
3	18.92	12.20	10.3419	10.2746	-0.00018	-0.00016	262.6832	260.9744	-0.00018	-0.00016	180	162	171
7	18.87	12.13	10.3414	10.2741	-0.00023	-0.00021	262.6718	260.9624	-0.00023	-0.00021	229	214	221
14	18.77	12.04	10.3402	10.2728	-0.00036	-0.00035	262.6413	260.9300	-0.00036	-0.00035	358	352	355
21	16.29	9.54	10.3402	10.2728	-0.00036	-0.00036	262.6400	260.9287	-0.00036	-0.00036	363	357	360
28	13.65	6.91	10.3392	10.2719	-0.00047	-0.00045	262.6159	260.9065	-0.00047	-0.00045	465	452	459
35	13.64	6.91	10.3392	10.2718	-0.00047	-0.00047	262.6146	260.9027	-0.00047	-0.00047	471	468	470
42	13.62	6.90	10.3392	10.2719	-0.00047	-0.00045	262.6159	260.9071	-0.00047	-0.00045	465	450	457
49	13.61	6.88	10.3389	10.2717	-0.00049	-0.00048	262.6089	260.9001	-0.00049	-0.00048	495	479	487
56	13.59	6.85	10.3388	10.2715	-0.00051	-0.00050	262.6051	260.8950	-0.00051	-0.00050	511	501	506
63	13.56	6.83	10.3385	10.2713	-0.00054	-0.00052	262.5975	260.8912	-0.00054	-0.00052	543	517	530
70	13.56	6.83	10.3384	10.2711	-0.00055	-0.00054	262.5962	260.8868	-0.00055	-0.00054	549	536	542
77	13.55	6.81	10.3383	10.2710	-0.00056	-0.00056	262.5937	260.8823	-0.00056	-0.00056	559	555	557
84	13.54	6.80	10.3383	10.2709	-0.00057	-0.00056	262.5918	260.8804	-0.00057	-0.00056	567	563	565
91	13.54	6.80	10.3382	10.2709	-0.00057	-0.00056	262.5911	260.8804	-0.00057	-0.00056	570	563	567
98	13.53	6.80	10.3381	10.2709	-0.00059	-0.00057	262.5873	260.8798	-0.00059	-0.00057	586	566	576

ตารางที่ 3.6 การหดตัวแบบแห้งของคอนกรีต CRE

Age (Days)	Li (in)		Lx (in)		Diff. Length (in)		Lx (mm)		Diff. Length (mm)		Shrinkage x10 ⁻⁶		Average
	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	
0	20.75	14.76	10.3603	10.3004	0.00000	0.00000	263.1512	261.6297	0.00000	0.00000	0	0	0
3	20.62	14.63	10.3590	10.2991	-0.00014	-0.00014	263.1188	261.5974	-0.00014	-0.00014	137	139	138
7	20.51	14.52	10.3580	10.2981	-0.00025	-0.00025	263.0921	261.5713	-0.00025	-0.00025	251	250	250
14	20.42	14.42	10.3572	10.2971	-0.00033	-0.00036	263.0731	261.5459	-0.00033	-0.00036	331	359	345
21	20.31	14.30	10.3559	10.2957	-0.00048	-0.00051	263.0388	261.5116	-0.00048	-0.00051	477	505	491
28	20.28	14.25	10.3554	10.2952	-0.00052	-0.00056	263.0280	261.4983	-0.00052	-0.00056	523	562	542
35	20.19	14.15	10.3546	10.2942	-0.00062	-0.00067	263.0058	261.4729	-0.00062	-0.00067	617	671	644
42	20.17	14.11	10.3543	10.2936	-0.00064	-0.00073	262.9994	261.4583	-0.00064	-0.00073	644	733	689
49	15.14	9.07	10.3544	10.2936	-0.00064	-0.00074	263.0013	261.4564	-0.00064	-0.00074	636	741	689
56	15.12	9.05	10.3539	10.2930	-0.00069	-0.00080	262.9880	261.4431	-0.00069	-0.00080	692	799	745
63	15.11	9.04	10.3540	10.2932	-0.00068	-0.00078	262.9905	261.4462	-0.00068	-0.00078	682	785	733
70	15.09	9.02	10.3538	10.2931	-0.00070	-0.00079	262.9861	261.4443	-0.00070	-0.00079	700	793	747
77	15.08	8.99	10.3537	10.2928	-0.00071	-0.00083	262.9842	261.4367	-0.00071	-0.00083	709	826	767
84	15.07	8.97	10.3536	10.2926	-0.00072	-0.00085	262.9817	261.4316	-0.00072	-0.00085	719	847	783
91	15.06	8.95	10.3535	10.2924	-0.00074	-0.00087	262.9778	261.4259	-0.00074	-0.00087	735	872	804
98	15.05	8.93	10.3533	10.2922	-0.00075	-0.00089	262.9740	261.4208	-0.00075	-0.00089	752	894	823

ตารางที่ ง.7 การหดตัวแบบแห้งของคอนกรีต CRE20

Age (Days)	Li (in)		Lx (in)		Diff. Length (in)		Lx (mm)		Diff. Length (mm)		Shrinkage x10 ⁻⁶		Average
	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	
0	19.91	11.50	10.3519	10.2678	0.00000	0.00000	262.9372	260.8011	0.00000	0.00000	0	0	0
3	19.77	11.36	10.3505	10.2665	-0.00014	-0.00014	262.9036	260.7693	-0.00014	-0.00014	144	136	140
7	19.67	11.28	10.3496	10.2656	-0.00024	-0.00023	262.8801	260.7465	-0.00024	-0.00023	244	233	239
14	19.51	11.17	10.3480	10.2646	-0.00042	-0.00034	262.8394	260.7211	-0.00042	-0.00034	418	342	380
21	19.42	11.07	10.3470	10.2634	-0.00053	-0.00048	262.8140	260.6899	-0.00053	-0.00048	527	475	501
28	19.34	10.99	10.3461	10.2625	-0.00063	-0.00057	262.7899	260.6684	-0.00063	-0.00057	630	567	599
35	19.30	10.96	10.3457	10.2623	-0.00067	-0.00059	262.7810	260.6626	-0.00067	-0.00059	668	591	630
42	19.27	10.94	10.3453	10.2619	-0.00071	-0.00063	262.7708	260.6531	-0.00071	-0.00063	712	632	672
49	14.20	5.88	10.3446	10.2614	-0.00078	-0.00069	262.7537	260.6404	-0.00078	-0.00069	785	686	736
56	14.20	5.87	10.3446	10.2614	-0.00078	-0.00069	262.7537	260.6398	-0.00078	-0.00069	785	689	737
63	14.18	5.85	10.3448	10.2616	-0.00076	-0.00067	262.7581	260.6449	-0.00076	-0.00067	766	667	717
70	14.17	5.85	10.3446	10.2614	-0.00079	-0.00069	262.7524	260.6404	-0.00079	-0.00069	790	686	738
77	14.16	5.82	10.3444	10.2611	-0.00081	-0.00072	262.7486	260.6322	-0.00081	-0.00072	807	722	764
84	14.15	5.81	10.3444	10.2609	-0.00081	-0.00074	262.7467	260.6277	-0.00081	-0.00074	815	741	778
91	14.13	5.79	10.3442	10.2609	-0.00083	-0.00075	262.7435	260.6271	-0.00083	-0.00075	828	743	786
98	14.12	5.79	10.3441	10.2608	-0.00084	-0.00076	262.7404	260.6233	-0.00084	-0.00076	842	760	801

ตารางที่ ๖.๘ การหดตัวแบบแห้งของคอนกรีต CRE35

Age (Days)	Li (in)		Lx (in)		Diff. Length (in)		Lx (mm)		Diff. Length (mm)		Shrinkage x10 ⁻⁶		Average
	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	
0	22.39	17.09	10.3767	10.3237	0.00000	0.00000	263.5671	262.2209	0.00000	0.00000	0	0	0
3	22.26	16.97	10.3754	10.3226	-0.00013	-0.00012	263.5360	262.1936	-0.00013	-0.00012	133	117	125
7	22.15	16.87	10.3744	10.3216	-0.00024	-0.00022	263.5093	262.1682	-0.00024	-0.00022	247	226	236
14	22.08	16.80	10.3736	10.3208	-0.00033	-0.00031	263.4890	262.1479	-0.00033	-0.00031	334	313	323
21	21.96	16.66	10.3723	10.3194	-0.00047	-0.00046	263.4573	262.1123	-0.00047	-0.00046	469	465	467
28	21.86	16.57	10.3713	10.3184	-0.00058	-0.00057	263.4300	262.0876	-0.00058	-0.00057	586	571	578
35	21.79	16.51	10.3706	10.3177	-0.00065	-0.00064	263.4128	262.0704	-0.00065	-0.00064	659	645	652
42	21.75	16.49	10.3700	10.3175	-0.00071	-0.00067	263.3989	262.0634	-0.00071	-0.00067	719	674	697
49	16.72	11.48	10.3699	10.3176	-0.00072	-0.00066	263.3963	262.0660	-0.00072	-0.00066	730	664	697
56	16.71	11.47	10.3698	10.3174	-0.00074	-0.00068	263.3925	262.0622	-0.00074	-0.00068	746	680	713
63	16.71	11.47	10.3700	10.3176	-0.00072	-0.00065	263.3976	262.0679	-0.00072	-0.00065	724	655	690
70	16.70	11.44	10.3698	10.3173	-0.00073	-0.00069	263.3938	262.0590	-0.00073	-0.00069	741	693	717
77	16.68	11.43	10.3697	10.3172	-0.00075	-0.00070	263.3906	262.0558	-0.00075	-0.00070	754	707	731
84	16.67	11.42	10.3696	10.3171	-0.00076	-0.00071	263.3868	262.0533	-0.00076	-0.00071	770	718	744
91	16.66	11.40	10.3694	10.3169	-0.00078	-0.00073	263.3836	262.0495	-0.00078	-0.00073	784	734	759
98	16.64	11.39	10.3693	10.3168	-0.00079	-0.00074	263.3804	262.0469	-0.00079	-0.00074	797	745	771

ตารางที่ ง.9 การหดตัวแบบแห้งของคอนกรีต CRE50

Age (Days)	Li (in)		Lx (in)		Diff. Length (in)		Lx (mm)		Diff. Length (mm)		Shrinkage x10 ⁻⁶		Average
	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	No.1	No.2	
0	20.68	22.39	10.3596	10.3767	0.00000	0.00000	263.1328	263.5671	0.00000	0.00000	0	0	0
3	20.58	22.26	10.3587	10.3754	-0.00009	-0.00013	263.1112	263.5360	-0.00009	-0.00013	92	132	112
7	20.50	22.15	10.3578	10.3744	-0.00020	-0.00025	263.0871	263.5093	-0.00020	-0.00025	196	245	220
14	20.40	22.08	10.3568	10.3736	-0.00030	-0.00033	263.0623	263.4890	-0.00030	-0.00033	302	331	316
21	20.34	21.96	10.3561	10.3723	-0.00038	-0.00047	263.0439	263.4573	-0.00038	-0.00047	381	465	423
28	20.26	21.86	10.3553	10.3713	-0.00047	-0.00058	263.0236	263.4300	-0.00047	-0.00058	468	581	524
35	20.22	21.79	10.3547	10.3706	-0.00053	-0.00066	263.0096	263.4128	-0.00053	-0.00066	528	654	591
42	20.21	21.75	10.3545	10.3700	-0.00055	-0.00072	263.0052	263.3989	-0.00055	-0.00072	547	713	630
49	15.17	16.72	10.3542	10.3699	-0.00058	-0.00073	262.9975	263.3963	-0.00058	-0.00073	579	723	651
56	15.13	16.71	10.3541	10.3698	-0.00059	-0.00074	262.9937	263.3925	-0.00059	-0.00074	596	740	668
63	15.11	16.71	10.3540	10.3700	-0.00061	-0.00072	262.9912	263.3976	-0.00061	-0.00072	606	718	662
70	15.10	16.70	10.3539	10.3698	-0.00062	-0.00074	262.9880	263.3938	-0.00062	-0.00074	620	734	677
77	15.08	16.68	10.3537	10.3697	-0.00064	-0.00075	262.9829	263.3906	-0.00064	-0.00075	642	748	695
84	15.07	16.67	10.3536	10.3696	-0.00065	-0.00077	262.9817	263.3868	-0.00065	-0.00077	647	764	706
91	15.05	16.66	10.3534	10.3694	-0.00067	-0.00078	262.9766	263.3836	-0.00067	-0.00078	669	777	723
98	15.05	16.64	10.3533	10.3693	-0.00068	-0.00080	262.9728	263.3804	-0.00068	-0.00080	685	791	738