Appendix A
Correlation Matrices

PA01

All data, N=8414

	Outdoor Air (W, g/kg)	First Floor Air (W, g/kg)	Sub-slab Air (W, g/kg)	ASD On/Off	HAC (% On)	Basement Air (W, g/kg)
Outdoor Air	1	0.795	0.735	0.242	0.088	0.837
First Floor Air	0.795	1	0.829	0.265	-0.041	0.932
Sub-slab Air	0.735	0.829	1	0.182	0.112	0.922
ASD On/Off	0.242	0.265	0.182	1	-0.060	0.209
HAC On/Off	0.088	-0.041	0.112	-0.060	1	0.070
Basement Air	0.837	0.932	0.922	0.209	0.070	1

PA02

All data, N=8545

	Outdoor Air (W, g/kg)	First Floor Air (W, g/kg)	Sub-slab Air (W, g/kg)	ASD On/Off	HAC (% On)	Basement Air (W, g/kg)
Outdoor Air	1	0.757	0.597	0.110	-0.412	0.723
First Floor Air	0.757	1	0.801	-0.137	-0.465	0.952
Sub-slab Air	0.597	0.801	1	-0.100	-0.343	0.861
ASD On/Off	0.110	-0.137	-0.100	1	0.059	-0.246
HAC On/Off	-0.412	-0.465	-0.343	0.059	1	-0.447
Basement Air	0.723	0.952	0.861	-0.246	-0.447	1

PA03

All data, N=7261

	Outdoor Air (W, g/kg)	First Floor Air (W, g/kg)	Sub-slab Air (W, g/kg)	ASD On/Off	HAC (% On)	Basement Air (W, g/kg)
Outdoor Air	1	0.881	0.796	-0.102	0.318	0.857
First Floor Air	0.881	1	0.892	-0.153	0.203	0.969
Sub-slab Air	0.796	0.892	1	-0.221	0.279	0.928
ASD On/Off	-0.102	-0.153	-0.221	1	0.087	-0.253
HAC On/Off	0.318	0.203	0.279	0.087	1	0.163
Basement Air	0.857	0.969	0.928	-0.253	0.163	1

Appendix B
Regression Results

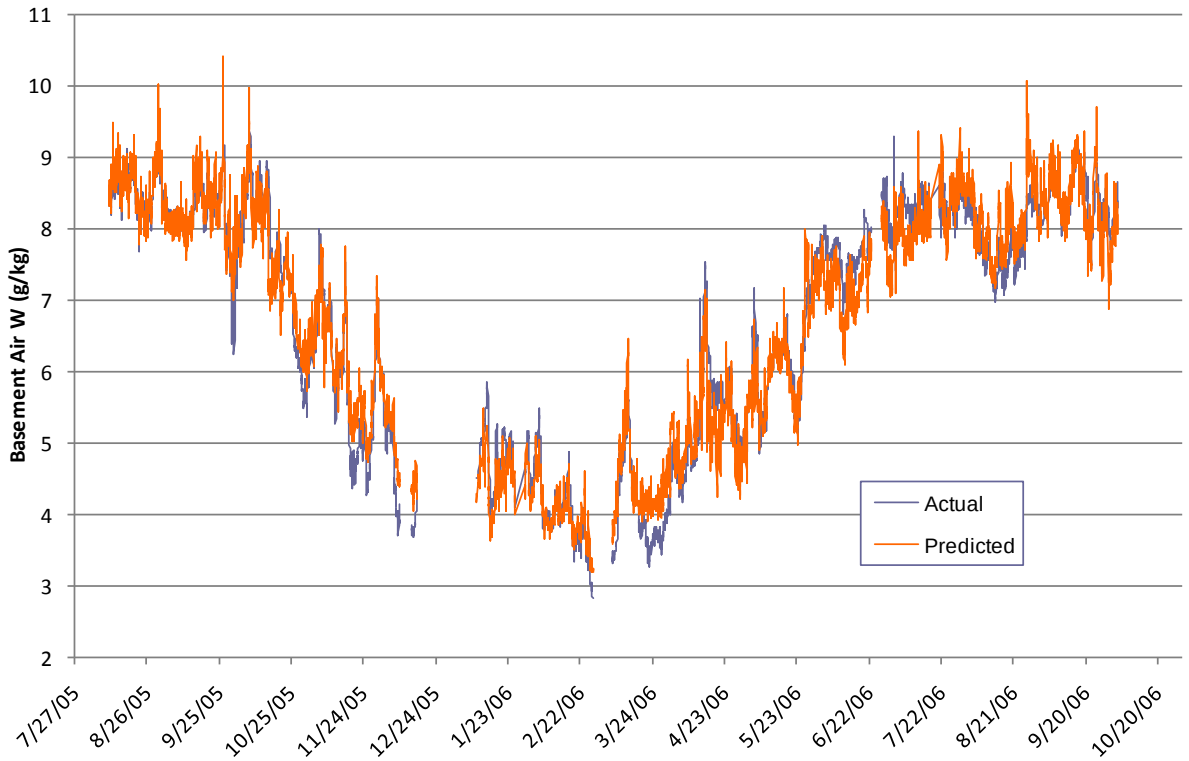
PA01

5 Variable

PA01 All Data – 5 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Outdoor Air (x_{out})	0.064168	0.001568	40.931741	0.0001
First Floor Air (x_{1st})	0.45168	0.005148	87.745755	0.0001
Sub-Slab Air (x_{ss})	0.454601	0.004882	93.1269	0.0001
ASD (x_{asd} - binary)	-0.097384	0.008833	-11.025275	0.0001
HAC (x_{hac})	0.001825	0.000192	9.525329	0.0001
Intercept (C)	-2.146694			

Source	Sum of Squares	df	Mean Square	F Value	Sig Level	Multi-R^2	Std Dev of Regr
Regression	23152.37646	5	4630.475292	32832.19466	0	0.951277	0.375546
Residual	1185.818879	8408	0.141035				



PA01 Summer Data – 5 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Outdoor Air (x_{out})	0.037574	0.001633	23.012658	0.0001
First Floor Air (x_{1st})	0.325708	0.006337	51.394114	0.0001
Sub-Slab Air (x_{ss})	0.231574	0.006108	37.912836	0.0001
ASD (x_{asd} - binary)	-0.163225	0.012448	-13.112246	0.0001
HAC (x_{hac})	0.002137	0.000204	10.483643	0.0001
Intercept (C)	2.157656			

Source	Sum of Squares	df	Mean Square	F Value	Sig Level	Multi-R^2	Std Dev of Regr
Regression	566.660198	5	113.33204	1481.658384	0	0.668299	0.276568
Residual	281.253705	3677	0.07649				

PA01 Non-Summer Data – 5 Variable

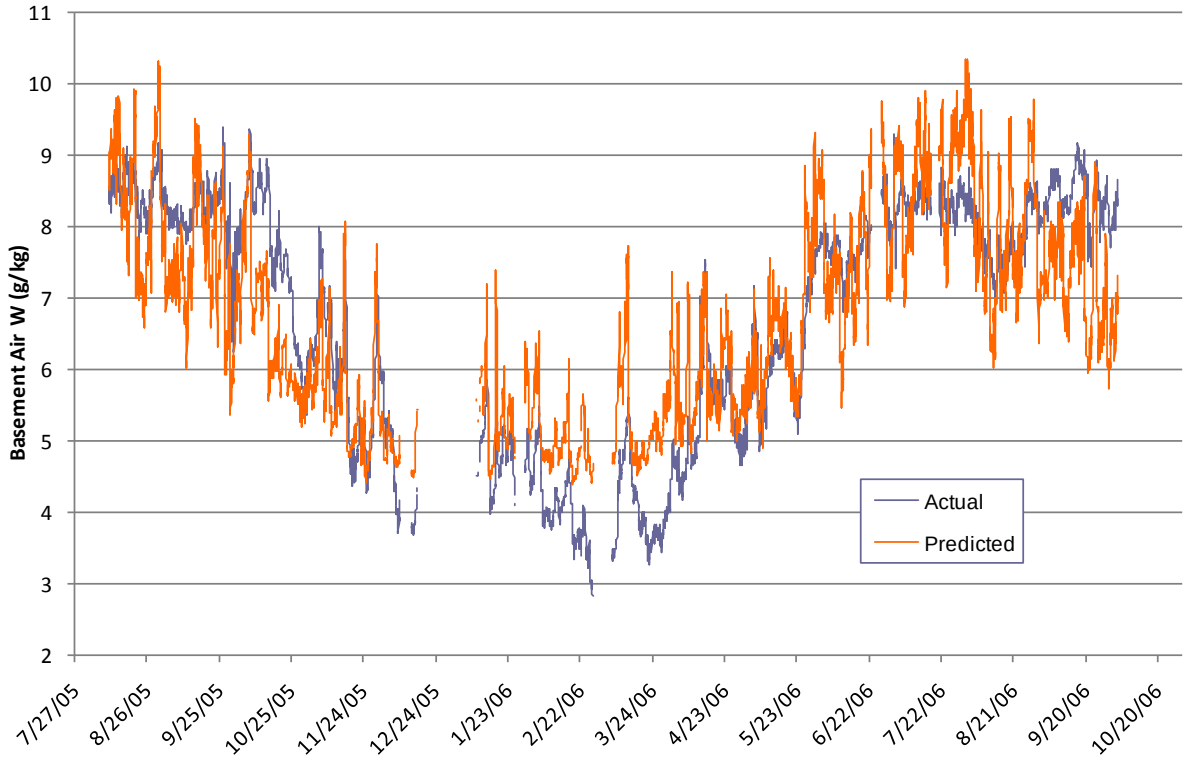
Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Outdoor Air (x_{out})	0.103326	0.003304	31.273041	0.0001
First Floor Air (x_{1st})	0.32156	0.008419	38.196819	0.0001
Sub-Slab Air (x_{ss})	0.56307	0.007166	78.576206	0.0001
ASD (x_{asd} - binary)	-0.187565	0.0107	-17.529385	0.0001
HAC (x_{hac})	0.001025	0.000261	3.925989	0.0001
Intercept (C)	-2.723248			

Source	Sum of Squares	df	Mean Square	F Value	Sig Level	Multi-R^2	Std Dev of Regr
Regression	9457.545299	5	1891.50906	14115.91476	0	0.937292	0.366058
Residual	632.740133	4722	0.133998				

3 Variable

PA01 All Data – 3 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Outdoor Air (x_{out})	0.317234	0.002346	135.235937	0.0001
ASD (x_{asd} - binary)	0.024347	0.021691	1.12245	0.261703
HAC (x_{hac})	-0.000246	0.000456	-0.540711	0.588721
Intercept (C)	4.142654			
Multi-R^2	0.700938			



PA01 – 3 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Summer Data				
Outdoor Air (x_{out})	0.063268	0.002319	27.276956	0.0001
ASD (x_{asd} - binary)	-0.303696	0.017492	-17.362294	0.0001
HAC (x_{hac})	0.000983	0.00029	3.385023	0.000719
Intercept (C)	7.619858			
Multi-R^2	0.41445			
Non-Summer Data				
Outdoor Air (x_{out})	0.416873	0.004987	83.597387	0.0001
ASD (x_{asd} - binary)	-0.135964	0.027097	-5.017757	0.0001
HAC (x_{hac})	0.00357	0.000631	5.659191	0.0001
Intercept (C)	3.541164			
Multi-R^2	0.596707			

PA01 – 2 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
All Data				
Outdoor Air (x_{out})	0.317101	0.002333	135.943579	0.0001
ASD (x_{asd} - binary)	0.02533	0.021613	1.171961	0.241246
Intercept (C)	4.139959			
Multi-R^2	0.700927			
Summer Data				
Outdoor Air (x_{out})	0.064531	0.002292	28.14985	0.0001
ASD (x_{asd} - binary)	-0.308809	0.017451	-17.696045	0.0001
Intercept (C)	7.623535			
Multi-R^2	0.415031			
Non-Summer Data				
Outdoor Air (x_{out})	0.414637	0.004987	83.138763	0.0001
ASD (x_{asd} - binary)	-0.146256	0.027124	-5.392106	0.0001
Intercept (C)	3.597976			
Multi-R^2	0.593973			

PA01 – 1 Variable (Outdoor)

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
All Data				
Outdoor Air (x_{out})	0.317762	0.002263	140.393536	0.0001
Intercept (C)	4.150505			
Multi-R^2	0.700878			
Summer Data				
Outdoor Air (x_{out})	0.072309	0.002388	30.273931	0.0001
Intercept (C)	7.275866			
Multi-R^2	0.199349			
Non-Summer Data				
Outdoor Air (x_{out})	0.413404	0.004997	82.728922	0.0001
Intercept (C)	3.533293			
Multi-R^2	0.591532			

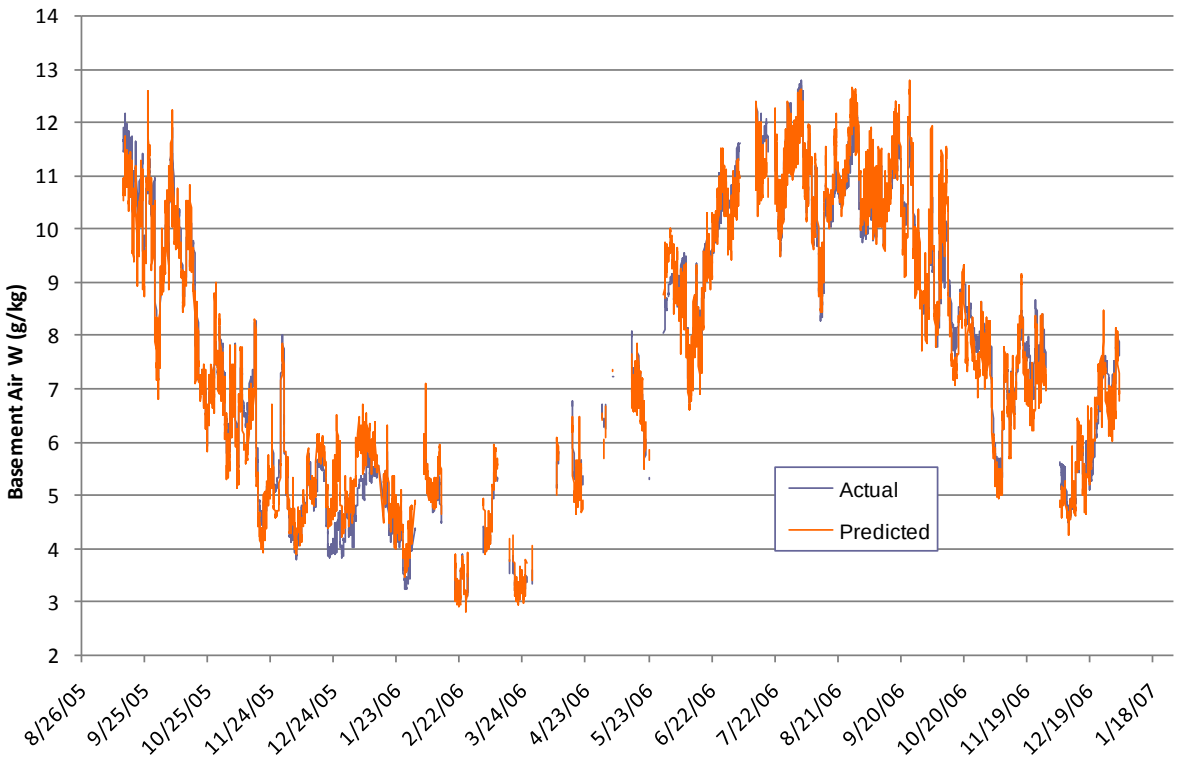
PA02

5 Variable

PA02 All Data – 5 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Outdoor Air (x_{out})	0.076544	0.002287	33.476124	0.0001
First Floor Air (x_{1st})	0.678221	0.005818	116.576702	0.0001
Sub-Slab Air (x_{ss})	0.580109	0.006877	84.359092	0.0001
ASD (x_{asd} - binary)	-0.444765	0.010124	-43.932105	0.0001
HAC (x_{hac})	-0.0002	0.000253	-0.788693	0.430314
Intercept (C)	-5.491084			

Source	Sum of Squares	df	Mean Square	F Value	Sig Level	Multi-R^2	Std Dev of Regr
Regression	52759.21958	5	10551.84392	51368.24511	0	0.967824	0.453228
Residual	1754.044644	8539	0.205416				



PA02 Summer Data – 5 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Outdoor Air (x_{out})	0.112697	0.00366	30.788544	0.0001
First Floor Air (x_{1st})	0.445147	0.012168	36.582455	0.0001
Sub-Slab Air (x_{ss})	0.585047	0.009554	61.237518	0.0001
ASD (x_{asd} - binary)	-0.196418	0.016904	-11.619812	0.0001
HAC (x_{hac})	0.001875	0.000399	4.694229	0.0001
Intercept (C)	-4.068464			

Source	Sum of Squares	df	Mean Square	F Value	Sig Level	Multi-R^2	Std Dev of Regr
Regression	2824.938696	5	564.987739	3073.010515	0	0.851247	0.428783
Residual	493.650143	2685	0.183855				

PA02 Non-Summer Data – 5 Variable

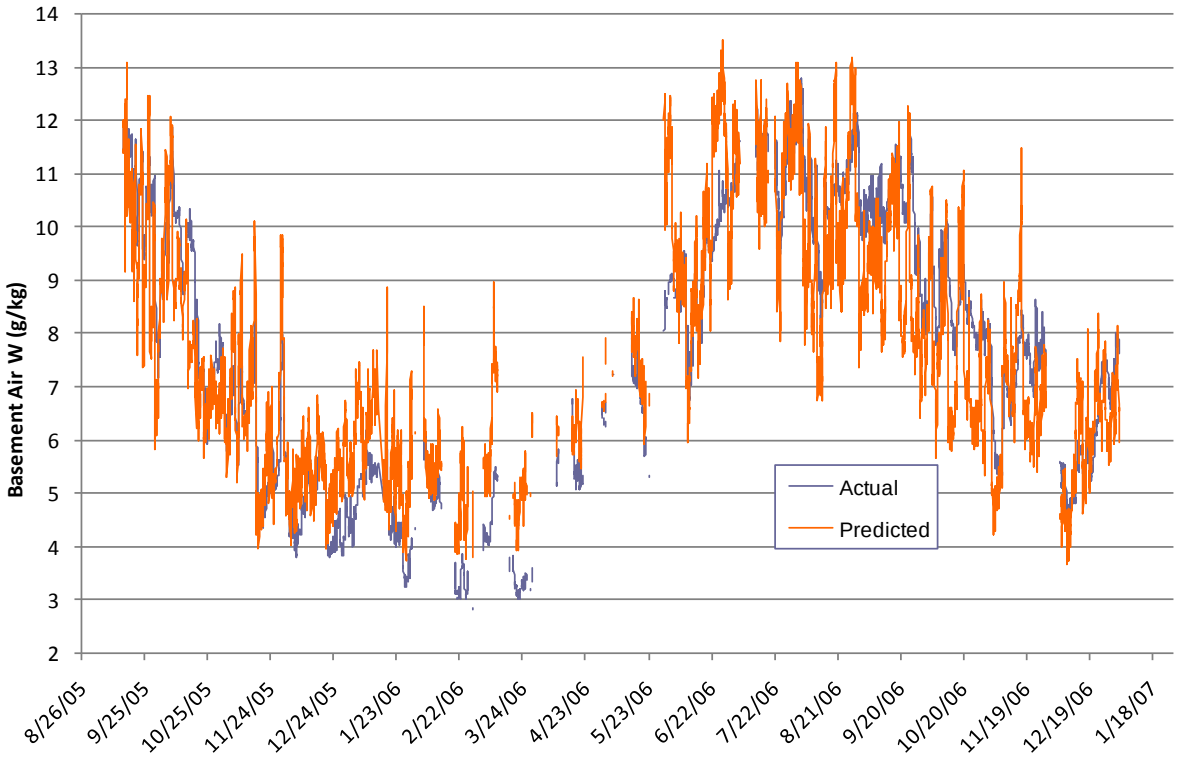
Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Outdoor Air (x_{out})	0.057568	0.003469	16.595664	0.0001
First Floor Air (x_{1st})	0.707769	0.007082	99.941734	0.0001
Sub-Slab Air (x_{ss})	0.57084	0.010002	57.074371	0.0001
ASD (x_{asd} - binary)	-0.534199	0.012192	-43.814219	0.0001
HAC (x_{hac})	-0.001089	0.000354	-3.081223	0.002071
Intercept (C)	-5.390239			

Source	Sum of Squares	df	Mean Square	F Value	Sig Level	Multi-R^2	Std Dev of Regr
Regression	20824.57023	5	4164.914045	21932.60378	0	0.949373	0.435771
Residual	1110.511893	5848	0.189896				

3 Variable

PA02 All Data – 3 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Outdoor Air (x_{out})	0.504041	0.003032	166.237087	0.0001
ASD (x_{asd} - binary)	-0.843651	0.026628	-31.68296	0.0001
HAC (x_{hac})	-0.010933	0.000661	-16.545557	0.0001
Intercept (C)	4.728549			
Multi-R^2	0.767644			



PA02 – 3 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Summer Data				
Outdoor Air (x_{out})	0.203347	0.006014	33.812514	0.0001
ASD (x_{asd} - binary)	-0.161486	0.034216	-4.719649	0.0001
HAC (x_{hac})	0.006653	0.000799	8.322287	0.0001
Intercept (C)	7.970024			
Multi-R^2	0.389641			
Non-Summer Data				
Outdoor Air (x_{out})	0.505799	0.00623	81.185649	0.0001
ASD (x_{asd} - binary)	-1.217581	0.030494	-39.928026	0.0001
HAC (x_{hac})	-0.014765	0.000907	-16.279711	0.0001
Intercept (C)	4.820254			
Multi-R^2	0.646311			

PA02 – 2 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
All Data				
Outdoor Air (x_{out})	0.503967	0.00308	163.621282	0.0001
ASD (x_{asd} - binary)	-0.885115	0.02693	-32.86769	0.0001
Intercept (C)	4.597521			
Multi-R^2	0.760196			
Summer Data				
Outdoor Air (x_{out})	0.223278	0.005586	39.970485	0.0001
ASD (x_{asd} - binary)	-0.118492	0.03425	-3.45961	0.000549
Intercept (C)	7.816428			
Multi-R^2	0.373909			
Non-Summer Data				
Outdoor Air (x_{out})	0.548538	0.005776	94.96673	0.0001
ASD (x_{asd} - binary)	-1.274803	0.030967	-41.166391	0.0001
Intercept (C)	4.453688			
Multi-R^2	0.630288			

PA02 – 1 Variable (Outdoor)

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
All Data				
Outdoor Air (x_{out})	0.494422	0.003254	151.928933	0.0001
Intercept (C)	4.197321			
Multi-R^2	0.729869			
Summer Data				
Outdoor Air (x_{out})	0.222944	0.005597	39.835419	0.0001
Intercept (C)	7.752778			
Multi-R^2	0.371121			
Non-Summer Data				
Outdoor Air (x_{out})	0.522418	0.006519	80.135033	0.0001
Intercept (C)	3.930684			
Multi-R^2	0.523205			

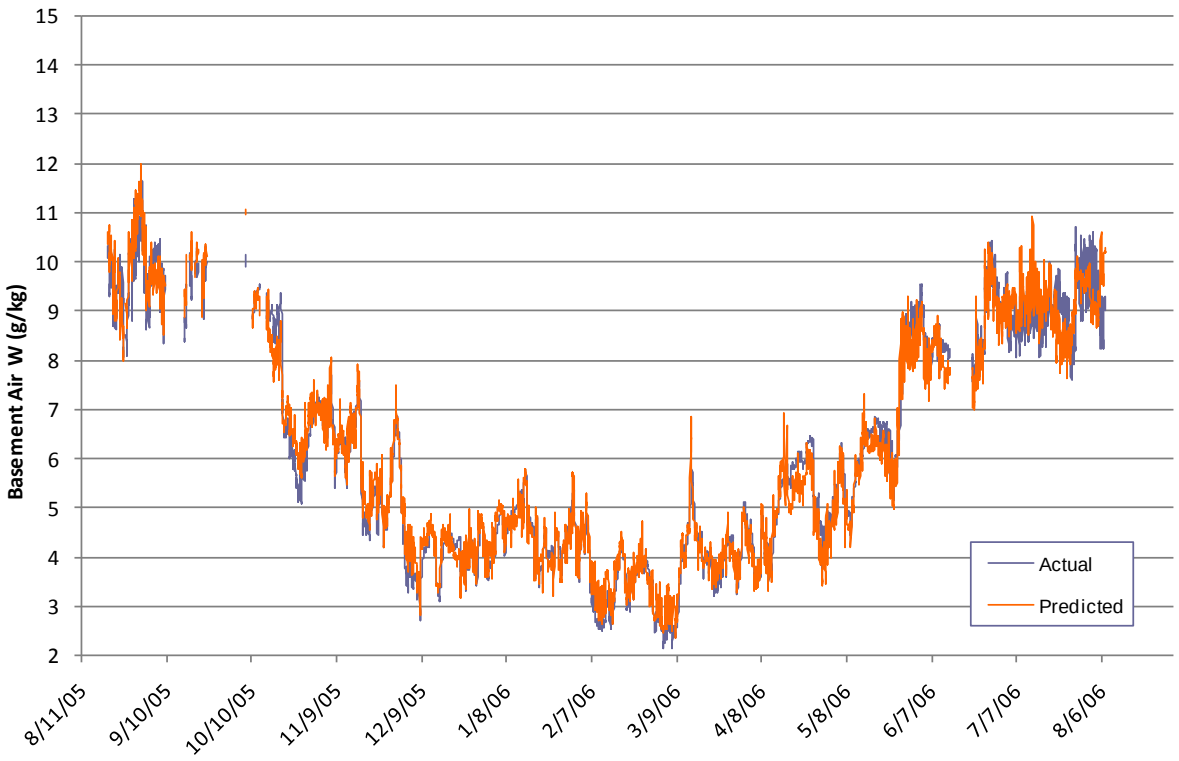
PA03

5 Variable

PA03 All Data – 5 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Outdoor Air (x_{out})	0.027586	0.002293	12.028026	0.0001
First Floor Air (x_{1st})	0.6859	0.006507	105.408097	0.0001
Sub-Slab Air (x_{ss})	0.614823	0.009486	64.8147	0.0001
ASD (x_{asd} - binary)	-0.346806	0.010108	-34.310176	0.0001
HAC (x_{hac})	-0.004041	0.000142	-28.414532	0.0001
Intercept (C)	-4.844249			

Source	Sum of Squares	df	Mean Square	F Value	Sig Level	Multi-R^2	Std Dev of Regr
Regression	37472.54696	5	7494.509393	45057.51447	0	0.968801	0.407838
Residual	1206.739126	7255	0.166332				



PA03 Summer Data – 5 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Outdoor Air (x_{out})	-0.007201	0.003718	-1.936968	0.052886
First Floor Air (x_{1st})	0.414105	0.0115	36.010487	0.0001
Sub-Slab Air (x_{ss})	0.881816	0.019287	45.719668	0.0001
ASD (x_{asd} - binary)	0.324901	0.025795	12.595672	0.0001
HAC (x_{hac})	-0.002321	0.000281	-8.251192	0.0001
Intercept (C)	-5.926721			

Source	Sum of Squares	df	Mean Square	F Value	Sig Level	Multi-R^2	Std Dev of Regr
Regression	943.663752	5	188.73275	1091.369477	0	0.726529	0.415851
Residual	355.202411	2054	0.172932				

PA03 Non-Summer Data – 5 Variable

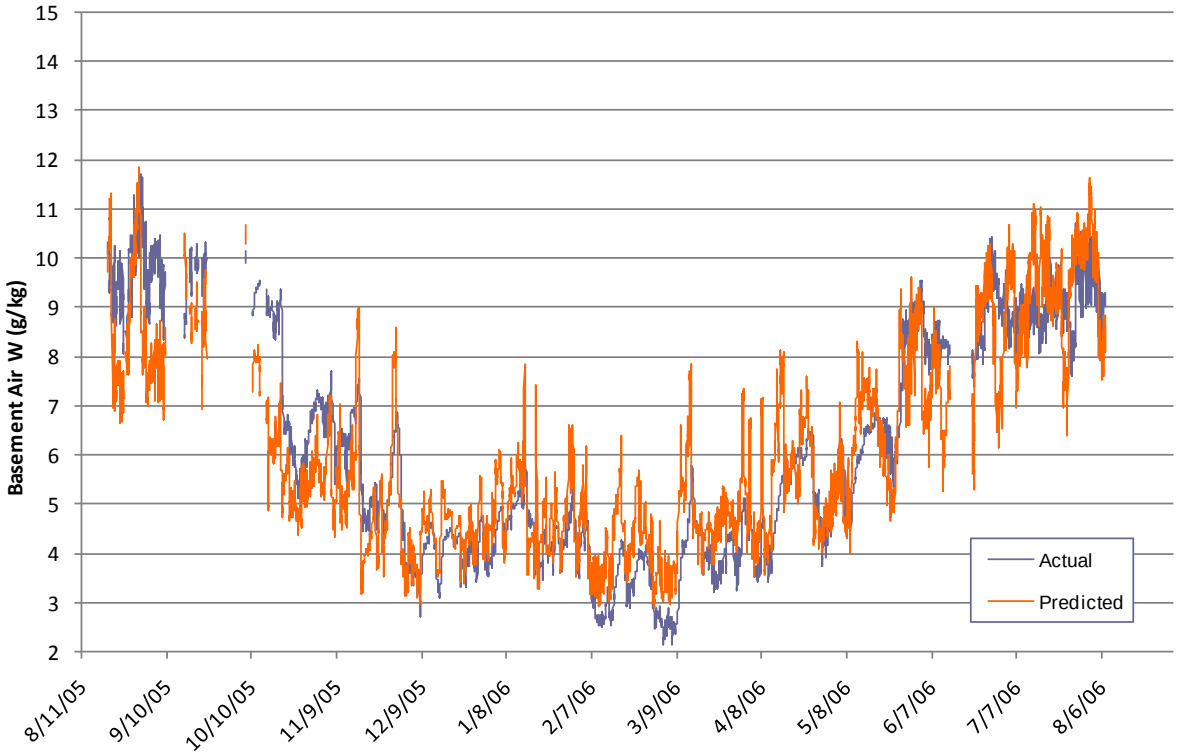
Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Outdoor Air (x_{out})	0.031217	0.002867	10.8878	0.0001
First Floor Air (x_{1st})	0.777379	0.008751	88.830309	0.0001
Sub-Slab Air (x_{ss})	0.511738	0.011091	46.138328	0.0001
ASD (x_{asd} - binary)	-0.488673	0.009434	-51.796833	0.0001
HAC (x_{hac})	-0.003296	0.000153	-21.568077	0.0001
Intercept (C)	-4.051891			

Source	Sum of Squares	df	Mean Square	F Value	Sig Level	Multi-R^2	Std Dev of Regr
Regression	10334.76901	5	2066.953801	19175.23768	0	0.948601	0.328318
Residual	559.983932	5195	0.107793				

3 Variable

PA03 All Data – 3 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Outdoor Air (x_{out})	0.436114	0.002979	146.420256	0.0001
ASD (x_{asd} - binary)	-0.723954	0.026453	-27.367627	0.0001
HAC (x_{hac})	-0.006238	0.000368	-16.939605	0.0001
Intercept (C)	3.639226			
Multi-R^2	0.772045			



PA03 – 3 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
Summer Data				
Outdoor Air (x_{out})	0.084578	0.005979	14.146147	0.0001
ASD (x_{asd} - binary)	-0.468278	0.033894	-13.815871	0.0001
HAC (x_{hac})	-0.002125	0.000482	-4.412409	0.0001
Intercept (C)	8.29067			
Multi-R^2	0.158022			
Non-Summer Data				
Outdoor Air (x_{out})	0.395237	0.006305	62.689178	0.0001
ASD (x_{asd} - binary)	-0.716869	0.028212	-25.409686	0.0001
HAC (x_{hac})	-0.006654	0.000433	-15.365231	0.0001
Intercept (C)	3.653721			
Multi-R^2	0.531931			

PA03 – 2 Variable

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
All Data				
Outdoor Air (x_{out})	0.419474	0.002867	146.325474	0.0001
ASD (x_{asd} - binary)	-0.78051	0.026753	-29.174285	0.0001
Intercept (C)	3.62112			
Multi-R^2	0.763032			
Summer Data				
Outdoor Air (x_{out})	0.072264	0.005311	13.6058	0.0001
ASD (x_{asd} - binary)	-0.459569	0.033988	-13.52141	0.0001
Intercept (C)	8.34768			
Multi-R^2	0.150049			
Non-Summer Data				
Outdoor Air (x_{out})	0.419058	0.006248	67.07285	0.0001
ASD (x_{asd} - binary)	-0.811418	0.028149	-28.825898	0.0001
Intercept (C)	3.490335			
Multi-R^2	0.510668			

PA03 – 1 Variable (Outdoor)

Variable Name	Fitted Coefficient	Standard Deviation	T-Value	Signif. Level
All Data				
Outdoor Air (x_{out})	0.427969	0.003014	141.980757	0.0001
Intercept (C)	3.226324			
Multi-R^2	0.735242			
Summer Data				
Outdoor Air (x_{out})	0.071313	0.00554	12.871408	0.0001
Intercept (C)	8.201959			
Multi-R^2	0.074504			
Non-Summer Data				
Outdoor Air (x_{out})	0.423337	0.006726	62.939222	0.0001
Intercept (C)	3.092036			
Multi-R^2	0.432445			

APPENDIX C
Moisture and Flow Data During Interzonal Flow Test Periods

Table C-1 shows: Absolute Humidity (AH) in grams of water per cubic meter of the relevant air masses, obtained by calculation from direct measurement of air temperature, RH and barometric pressure; flow quantities into the basement and upstairs from the indicated sources, obtained by calculation from tracer gas data; ASD basement air removal, calculated from direct measurement of total system air flow and tracer gas data; soil gas entry, calculated from measured basement and soil gas radon concentrations, and tracer gas-determined basement ventilation rates. ΔAH values were calculated as indicated, e.g., upstairs-basement, yielding a negative value (moisture loss to the basement) if the source air is drier than the basement air and a positive number (moisture gain to the basement) if the source air is wetter than the basement. Moisture gain or (loss) to the basement and upstairs is calculated from the ΔAH and flow quantities. The largest moisture loss and gain to the indicated space for each seasonal tracer gas study period in each house with ASD On or Off is indicated in **bold.** Note: ASD moisture removal values, in grams per minute and gallons per day, refer to the moisture content of the basement air removed. Comparing these values with the total moisture exiting the ASD stack (Table 7 of report) indicates that most of the moisture in the ASD exhaust came from somewhere other than the basement, probably the soil.

Table C-1

House ID	Season	ASD Config.	Average AH, (g/m^3)				Soil Gas			ASD			BASEMENT							
													Upstairs Air			Outdoor Air				
			Bsmt Air	Upstairs Air	Outdoor Air	Soil Gas	Soil Gas Entry (cfm)	ΔAH Soil Gas-Bsmt, (g/m^3)	Soil Gas Mois Contrib (g/min)	Bsmt Air Removal (cfm)	Bsmt Air Mois Removal (g/min)	Bsmt Air Mois Removal (gal/day)	Upstairs to Bsmt (cfm)	ΔAH Upstairs-Bsmt (g/m^3)	Upstairs Air Mois Contrib (g/min)	Outdoors to Bsmt (cfm)	ΔAH Outdoor-Bsmt (g/m3)	Outdoor Air Mois Contrib (g/min)	No. Flows Wetting / Drying	Net Bsmt Mois Gain / (Loss), (g/min)
PA01	Winter	Off	5.33	4.99	3.25	11.87	10.79	6.54	**2.00**		0.00	0.00	11.34	(0.34)	(0.11)	26.19	(2.08)	**(1.54)**	1/2	0.35
		On full	5.8	5.33	4.94	11.82	0.01	6.02	0.00	40.29	6.62	0.52	31.68	(0.47)	(0.42)	38.77	(0.86)	**(0.94)**	0 / 2	(1.37)
	Spring	Off	7.29	6.91	7.38	12.46	1.88	5.17	**0.27**		0.00	0.00	6.76	(0.38)	**(0.07)**	6.98	0.09	0.02	2/1	0.22
		On full	6.97	7.15	9.08	12.66	0.05	5.69	0.01	40.18	7.93	0.62	2.75	0.18	0.01	15.50	2.11	**0.93**	3/0	0.95
	Summer	Off	9.71	9.3	17.92	15.34	0.38	5.63	0.06		0.00	0.00	18.37	(0.41)	**(0.21)**	10.21	8.21	**2.37**	2/1	2.22
		On full	9.63	9.14	16.53	15.58	0.00	5.95	0.00	39.15	10.68	0.84	32.48	(0.49)	**(0.45)**	12.84	6.90	**2.51**	1/1	2.06
	Fall	Off	9.66	9.26	9.07	15.15	0.86	5.49	**0.13**		0.00	0.00	2.39	(0.40)	(0.03)	11.77	(0.59)	**(0.20)**	1/2	(0.09)
		On mod	10.08	11.17	13.17	15.16	0.01	5.08	0.00	28.27	8.07	0.63	4.34	1.09	0.13	9.14	3.09	**0.80**	2/0	0.94
PA02	Winter	Off	6.44	5.58	6.91	15.35	1.78	8.91	**0.45**		0.00	0.00	4.62	(0.86)	**(0.11)**	12.57	0.47	0.17	2/1	0.50
		On full	5.2	4.73	4.19	15.64	0.10	10.44	**0.03**	100.36	14.78	1.16	47.27	(0.47)	(0.63)	38.36	(1.01)	**(1.10)**	1/2	(1.70)
	Spring	Off	6	5.67	6.67	13.32	0.79	7.32	0.16		0.00	0.00	4.28	(0.33)	**(0.04)**	12.73	0.67	**0.24**	2/1	0.37
		On full	7.03	6.46	9.44	13.56	0.14	6.53	0.03	102.22	20.35	1.59	34.86	(0.57)	**(0.56)**	35.04	2.41	**2.39**	2/1	1.85
	Summer	Off	12.48	10.47	12.52	17.42	1.03	4.94	**0.14**		0.00	0.00	12.90	(2.01)	(0.73)	6.83	0.04	0.01	2/1	(0.58)
		On full	11.99	10.28	12.43	17.18	0.07	5.19	0.01	99.98	33.95	2.66	35.60	(1.71)	**(1.72)**	37.45	0.44	**0.47**	2/1	(1.25)
	Fall	Off	9.3	7.31	5.14	16.73	0.87	7.43	**0.18**		0.00	0.00	2.44	(1.99)	(0.14)	12.06	(4.16)	**(1.42)**	1/2	(1.38)
		On mod	8.24	6.76	3.8	16.31	0.09	8.07	**0.02**	64.99	15.17	1.19	18.73	(1.48)	(0.79)	29.60	(4.44)	**(3.72)**	1/2	(4.49)
PA03	Winter	Off	4.95	4.26	2.42	12.61	2.05	7.66	**0.45**		0.00	0.00	42.30	(0.69)	(0.83)	23.86	(2.53)	**(1.71)**	1/2	(2.09)
		On full	4.81	4.52	5.51	13.04	(0.04)	8.23	(0.01)	129.26	17.61	1.38	95.12	(0.29)	**(0.78)**	43.48	0.70	**0.86**	1/2	0.07
	Spring	Off	7.09	5.39	5.93	13.45	0.15	6.36	**0.03**		0.00	0.00	3.71	(1.70)	(0.18)	7.33	(1.16)	**(0.24)**	1/2	(0.39)
		On full	5.73	4.73	4.31	12.96	0.11	7.23	**0.02**	134.68	21.86	1.71	72.75	(1.00)	**(2.06)**	24.47	(1.42)	(0.98)	1/2	(3.02)
	Summer	Off	10.51	10.29	17.44	15.40	ND	4.89	ND		0.00	0.00	ND	(0.22)	ND	ND	6.93	ND		ND
		On full	10.74	9.63	17.39	15.46	(0.01)	4.72	(0.00)	137.31	41.77	3.27	132.40	(1.11)	**(4.16)**	38.03	6.65	**7.16**	1/1	3.00
	Fall	Off	7.98	6.17	8.44	14.95	0.21	6.97	0.04		0.00	0.00	8.20	(1.81)	**(0.42)**	7.04	0.46	**0.09**	2/1	(0.29)
		On mod	7.18	6.08	7.75	14.55	(0.01)	7.37	(0.00)	64.08	13.03	1.02	67.28	(1.10)	**(2.10)**	7.96	0.57	**0.13**	1/1	(1.97)

Table C-1 (continued)

			UPSTAIRS							
			Basement Air			Outdoor Air				
House ID	Season	ASD Config.	Bsmt to Upstairs (cfm)	ΔAH Bsmt-Upstairs (g/m3)	Bsmt Air Mois Contrib (g/min)	Outdoors to Upstairs (cfm)	ΔAH Outdoor-Upstairs (g/m3)	Outdoor Air Mois contrib (g/min)	No. Flows Wetting / Drying	Net Upstairs Mois Gain / (loss) (g/min)
PA01	Winter	Off	39.53	0.34	**0.38**	43.50	(1.74)	**(2.14)**	1/1	(1.76)
		On full	26.08	0.47	**0.35**	56.28	(0.39)	**(0.62)**	1/1	(0.27)
	Spring	Off	11.63	0.38	0.13	110.35	0.47	**1.47**	2/0	1.59
		On full	13.44	(0.18)	**(0.07)**	42.82	1.93	**2.34**	1/1	2.27
	Summer	Off	28.54	0.41	0.33	29.46	8.62	**7.19**	2/0	7.52
		On full	46.32	0.49	0.64	33.51	7.39	**7.01**	2/0	7.66
	Fall	Off	16.11	0.40	**0.18**	54.89	(0.19)	**(0.30)**	1/1	(0.11)
		On mod	10.20	(1.09)	**(0.32)**	57.97	2.00	**3.28**	1/1	2.97
PA02	Winter	Off	14.31	0.86	0.35	11.42	1.33	**0.43**	2/0	0.78
		On full	19.45	0.47	**0.26**	35.35	(0.54)	**(0.54)**	1/1	(0.28)
	Spring	Off	17.06	0.33	0.16	11.52	1.00	**0.33**	2/0	0.49
		On full	0.98	0.57	0.02	39.08	2.98	**3.30**	2/0	3.31
	Summer	Off	22.69	2.01	**1.29**	9.15	2.05	0.53	2/0	1.82
		On full	7.55	1.71	0.37	49.97	2.15	**3.04**	2/0	3.41
	Fall	Off	15.55	1.99	**0.88**	15.72	(2.17)	**(0.97)**	1/1	(0.09)
		On mod	13.61	1.48	**0.57**	32.45	(2.96)	**(2.72)**	1/1	(2.15)
PA03	Winter	Off	58.01	0.69	**1.13**	124.24	(1.84)	**(6.47)**	1/1	(5.34)
		On full	81.46	0.29	0.67	121.15	0.99	**3.40**	2/0	4.07
	Spring	Off	8.88	1.70	0.43	67.47	0.54	**1.03**	2/0	1.46
		On full	3.34	1.00	**0.09**	145.26	(0.42)	**(1.73)**	1/1	(1.63)
	Summer	Off	ND	0.22	ND	ND	7.15	ND		ND
		On full	141.93	1.11	4.46	124.10	7.76	**27.27**	2/0	31.74
	Fall	Off	13.62	1.81	0.70	86.03	2.27	**5.53**	2/0	6.23
		On mod	7.79	1.10	0.24	132.46	1.67	**6.26**	2/0	6.51

Table C-2. Convective Flow of Moisture Into and Out of Basement (g/min) During Measurement Periods for Ventilation and Interzonal Flow. Negative values indicate a gain of moisture into the basement.

House/Season/Condition		Soil Gas	Up-to-Base	Out-to-Base	Total	
PA01						
Winter	ASD Off	-3.63	4.37	-1.09	-0.35	gain
	ASD On Full	0.00	-0.50	1.92	1.42	loss
Spring	ASD Off	-0.66	1.08	-0.64	-0.22	gain
	ASD On Full	-0.02	2.10	-3.03	-0.95	gain
Summer	ASD Off	-0.17	3.01	-5.30	-2.46	gain
	ASD On Full	0.00	4.22	-6.13	-1.91	gain
Fall	ASD Off	-0.37	3.78	-3.20	0.21	loss
	ASD On Mod	0.00	1.54	-2.41	-0.87	gain
PA02						
Winter	ASD Off	-0.77	1.88	-1.76	-0.65	gain
	ASD On Full	-0.05	-3.47	4.61	1.10	loss
Spring	ASD Off	-0.30	2.21	-1.84	0.08	loss
	ASD On Full	-0.05	-6.18	4.35	-1.89	gain
Summer	ASD Off	-0.51	4.19	-1.90	1.78	loss
	ASD On Full	-0.04	-7.80	7.80	-0.04	gain
Fall	ASD Off	-0.41	3.59	-1.81	1.37	loss
	ASD On Mod	-0.04	-0.41	6.01	5.56	loss
PA03						
Winter	ASD Off	-0.73	3.03	-0.20	2.09	loss
	ASD On Full	0.01	-1.08	2.06	1.00	loss
Spring	ASD Off	-0.06	1.22	-0.77	0.39	loss
	ASD On Full	-0.04	-9.20	12.29	3.04	loss
Summer	ASD Off	ND	ND	ND	ND	ND
	ASD On Full	0.00	7.06	-5.83	1.24	loss
Fall	ASD Off	-0.09	1.64	-1.82	-0.27	gain
	ASD On Mod	0.00	-10.00	9.90	-0.10	gain