

APPENDIX A – ASHRAE STANDARD 62.1 VENTILATION CALCULATIONS

AHU - 1	Az	Pz	Rp	Ra	Pz*Rp	Az*Ra	Voz	Vpz	Vdz	Vdzm	Zp	Fa	Fb	Fc	Ps	D	Vou	Vps	Xs	Zp(max)	Ev	Vot	
Prep Area	5910	8	7.5	0.18	60	1063.8	1124	22000	22000	11000	0.10	1	1	1									
															8	1	1124	22000	0.05	0.10	1	1123.8	

AHU - 2	Az	Pz	Rp	Ra	Pz*Rp	Az*Ra	Voz	Vpz	Vdz	Vdzm	Zp	Fa	Fb	Fc	Ps	D	Vou	Vps	Xs	Zp(max)	Ev	Vot	
Dishwasher	405	3	7.5	0.18	22.5	72.9	95.4	1370	1370	685	0.14	1	1	1									
Pot Wash	383	3	7.5	0.18	22.5	68.9	91.4	1380	1380	690	0.13	1	1	1									
Storage	2000	3	7.5	0.18	22.5	360	383	10990	10990	5495	0.07	1	1	1									
Insulated Container Storage	1884	4	0	0.12	0	226	226	8260	8260	4130	0.05	1	1	1									
															13	1	795	22000	0.04	0.14	1	795	

AHU - 3	Az	Pz	Rp	Ra	Pz*Rp	Az*Ra	Voz	Vpz	Vdz	Vdzm	Zp	Fa	Fb	Fc	Ps	D	Vou	Vps	Xs	Zp(max)	Ev	Vot	
Dining	1213	100	7.5	0.18	750	218	968	1800	1800	1800	0.54	1	1	1									
Decoration Storage	96	0	0	0.12	0	11.5	11.5	75	75	40	0.29	1	1	1									
Women's Toilet	186	0	0	0.5	0	93	93	200	200	200	0.47	1	1	1									
Men's Toilet	172	0	0	0.5	0	86	86	200	200	200	0.43	1	1	1									
Storage	233	0	0	0.12	0	28	28	75	75	75	0.37	1	1	1									
Office 108	174	2	5	0.06	10	10.4	20.4	250	250	125	0.16	1	1	1									
Office 110	150	2	5	0.06	10	9	19	250	250	125	0.15	1	1	1									
Work Area 111	297	3	5	0.06	15	17.8	32.8	125	125	62.5	0.53	1	1	1									
Work Room 112	132	3	5	0.06	15	7.92	22.9	250	250	125	0.18	1	1	1									
Waiting 114	155	3	5	0.06	15	9.3	24.3	225	225	115	0.21	1	1	1									
Reception 113	160	2	5	0.06	10	9.6	19.6	250	250	125	0.16	1	1	1									
Lobby 115	315	2	5	0.06	10	18.9	28.9	312	312	156	0.19	1	1	1									
Waiting	169	3	5	0.06	15	10.1	25.1	100	100	75	0.34	1	1	1									
Reception	160	2	5	0.06	10	9.6	19.6	250	250	125	0.16	1	1	1									
Work Room	132	2	5	0.06	10	7.92	17.9	250	250	125	0.14	1	1	1									
Conference	244	10	5	0.06	50	14.6	64.6	450	450	225	0.29	1	1	1									
Work Area	516	3	5	0.06	15	31	46	250	250	125	0.37	1	1	1									
Office 123	152	2	5	0.06	10	9.12	19.1	250	250	125	0.15	1	1	1									
Office 124	175	2	5	0.06	10	10.5	20.5	250	250	125	0.16	1	1	1									
Office 125	228	2	5	0.06	10	13.7	23.7	250	250	125	0.19	1	1	1									
Servery	969	10	5	0.06	50	58.1	108	850	850	551	0.20	1	1	1									
Training	612	15	10	0.12	150	73.4	223	600	600	600	0.37	1	1	1									
Entry	105	0	0	0.06	0	6.3	6.3	75	75	50	0.13	1	1	1									
Corridor	2280	0	0	0.06	0	137	137	988	988	500	0.27	1	1	1									
Storage	114	0	0	0.12	0	13.7	13.7	175	175	90	0.15	1	1	1									
Office 144	96	1	5	0.06	5	5.76	10.8	175	175	90	0.12	1	1	1									
Office 145	96	2	5	0.06	10	5.76	15.8	175	175	90	0.18	1	1	1									
															171	1.00	1956.98	9100	0.22	0.53	0.6	3215	

AHU - 4	Az	Pz	Rp	Ra	Pz*Rp	Az*Ra	Voz	Vpz	Vdz	Vdzm	Zp	Fa	Fb	Fc	Ps	D	Vou	Vps	Xs	Zp(max)	Ev	Vot	
Janitor/Storage Storage	245	0	0	0.12	0	29.4	29.4	275	275	140	0.21	1	1	1									
Washer/Dryer Room	166	2	7.5	0.06	15	9.96	25	375	375	190	0.13	1	1	1									
Catering Storage	381	4	0	0.12	0	45.7	45.7	235	235	120	0.38	1	1	1									
Corridor	1060	0	0	0.06	0	63.6	63.6	300	300	150	0.42	1	1	1									
Custodial	726	0	0	0.12	0	87.1	87.1	450	450	225	0.39	1	1	1									
It	305	2	10	0.12	20	36.6	56.6	1680	1680	1680	0.03	1	1	1									
Break Room	895	12	7.5	0.18	90	161	251	900	900	500	0.50	1	1	1									
Mail Room	1235	6	5	0.06	30	74.1	104	930	930	465	0.22	1	1	1									
Insulated Container Washing	950	4	7.5	0.18	30	171	201	1500	1500	750	0.27	1	1	1									
Mens Locker Room	839	10	0	0.5	0	420	420	800	800	800	0.52	1	1	1									
Womens Locker Room	817	12	0	0.5	0	409	409	800	800	800	0.51	1	1	1									
Office	160	2	5	0.06	10	9.6	19.6	210	210	105	0.19	1	1	1									
Transportation Team Room	530	6	7.5	0.06	45	31.8	76.8	800	800	400	0.19	1	1	1									
Dispatcher	116	2	5	0.06	10	6.96	17	200	200	100	0.17	1	1	1									
															62	1.00	1817	9455	0.19	0.52	0.6	3008	

AHU - 5	Az	Pz	Rp	Ra	Pz*Rp	Az*Ra	Voz	Vpz	Vdz	Vdzm	Zp	Fa	Fb	Fc	Ps	D	Vou	Vps	Xs	Zp(max)	Ev	Vot	
Washing Area	110	1	0	0.5	0	55	55	250	250	250	0.22	1	1	1									
Recycling	1556	1	0	0.5	0	778	778	3000	3000	3000	0.26	1	1	1									
															2	1	833	3250	0.26	0.26	0.8	1041	

AHU - 6	Az	Pz	Rp	Ra	Pz*Rp	Az*Ra	Voz	Vpz	Vdz	Vdzm	Zp	Fa	Fb	Fc	Ps	D	Vou	Vps	Xs	Zp(max)	Ev	Vot	
Delivery	9063	12	0	0.12	0	1088	1088	13195	13195	6600	0.16	1	1	1									
Storage	177	0	0	0.12	0	21.2	21.2	135	135	70	0.30	1	1	1									
Storage	201	0	0	0.12	0	24.1	24.1	170	170	85	0.28	1	1	1									
															12	1	1133	13500	0.08	0.30	0.8	1416	

AHU - 7	Az	Pz	Rp	Ra	Pz*Rp	Az*Ra	Voz	Vpz	Vdz	Vdzm	Zp	Fa	Fb	Fc	Ps	D	Vou	Vps	Xs	Zp(max)	Ev	Vot	
Order Assembly/Storage	1351	4	0	0.12	0	162	162	1500	1500	750	0.22	1	1	1									
Corridor	3931	0	0	0.06	0	236	236	2400	2400	1200	0.20	1	1	1									
Catering/Storage	570	4	7.5	0.18	30	103	133	900	900	450	0.29	1	1	1									
Passage	300	0	0	0.06	0	18	18	200	200	100	0.18	1	1	1									
															8	1	549	5000	0.11	0.29	0.8	686	

AHU - 8	Az	Pz	Rp	Ra	Pz*Rp	Az*Ra	Voz	Vpz	Vdz	Vdzm	Zp	Fa	Fb	Fc	Ps	D	Vou	Vps	Xs	Zp(max)	Ev	Vot	
Bakery 169	1610	6	7.5	0.18	45	290	335	7400	7400	3700	0.09	1	1	1									
															6	1	335	7400	0.05	0.09	1	335	

AHU - 9	Az	Pz	Rp	Ra	Pz*Rp	Az*Ra	Voz	Vpz	Vdz	Vdzm	Zp	Fa	Fb	Fc	Ps	D	Vou	Vps	Xs	Zp(max)	Ev	Vot	
Kitchen Dry Storage	890	4	0	0.12	0	107	107	1005	1005	505	0.21	1	1	1									
Dry Storage	6250	4	0	0.12	0	750	750	4545	4545	2275	0.33	1	1	1									
Storage	721	0	0	0.12	0	86.5	86.5	450	450	225	0.38	1	1	1									
															8	1	943	6000	0.16	0.38	0.7	1348	

AHU - 10	Az	Pz	Rp	Ra	Pz*Rp	Az*Ra	Voz	Vpz	Vdz	Vdzm	Zp	Fa	Fb	Fc	Ps	D	Vou	Vps	Xs	Zp(max)	Ev	Vot	
Office 127	157	2	5	0.06	10	9.42	19.4	175	175	90	0.22	1	1	1									
Alterations	2535	8	7.5	0.12	60	304	364	2680	2680	1340	0.27	1	1	1									
Work Room	290	6	5	0.06	30	17.4	47.4	350	350	175	0.27	1	1	1									
Girls Fitting	100	6	7.5	0.06	45	6	51	180	180	100	0.51	1	1	1									
Boys Fitting	100	6	7.5	0.06	45	6	51	180	180	100	0.51	1	1	1									
Clothing	350	4	7.5	0.12	30	42	72	1955	1955	980	0.07	1	1	1									
Clothing Storage	863	6	7.5	0.12	45	104	149	1000	1000	500	0.30	1	1	1									
Used Clothing	350	4	7.5	0.12	30	42	72	400	400	200	0.36	1	1	1									
Corridor	385	0	0	0.06	0	23.1	23.1	580	580	290	0.08	1	1	1									
															42	1	849	7500	0.11	0.51	0.6	1414	

AHU - 11	Az	Pz	Rp	Ra	Pz*Rp	Az*Ra	Voz	Vpz	Vdz	Vdzm	Zp	Fa	Fb	Fc	Ps	D	Vou	Vps	Xs	Zp(max)	Ev	Vot	
IT	285	2	10	0.12	20	34.2	54.2	1605	1605	805	0.07	1	1	1									
Year Round Experience	640	4	7.5	0.06	30	38.4	68.4	600	600	300	0.23	1	1	1									
Laundry	432	2	7.5	0.06	15	25.9	40.9	900	900	450	0.09	1	1	1									
Program Support Inventory	1064	4	0	0.12	0	128	128	2140	2140	1070	0.12	1	1	1									
Corridor	1051	0	0	0.06	0	63.1	63.1	900	900	450	0.14	1	1	1									
															12	1	354	6145	0.06	0.23	0.9	394	

AHU - 12	Az	Pz	Rp	Ra	Pz*Rp	Az*Ra	Voz	Vpz	Vdz	Vdzm	Zp	Fa	Fb	Fc	Ps	D	Vou	Vps	Xs	Zp(max)	Ev	Vot
Storage	1094	6	0	0.06	0	65.6	65.6	1500	1500	750	0.09	1	1	1								
Mezzanine Storage	7182	6	0	0.06	0	431	431	4820	4820	2410	0.18	1	1	1								
Clothing	3266	4	7.5	0.12	30	392	422	4530	4530	2265	0.19	1	1	1	12	1	497	10850	0.05	0.19	0.9	552

AHU - 13	Az	Pz	Rp	Ra	Pz*Rp	Az*Ra	Voz	Vpz	Vdz	Vdzm	Zp	Fa	Fb	Fc	Ps	D	Vou	Vps	Xs	Zp(max)	Ev	Vot
Receiving	5810	6	0	0.12	0	697	697	5625	5625	2812	0.25	1.00	1.00	1								
General Building Storage	1660	4	0	0.12	0	199	199	1875	1875	938	0.21	1.00	1.00	1								
															10	1	896	7500	0.12	0.25	0.9	996

AHU - 14	Az	Pz	Rp	Ra	Pz*Rp	Az*Ra	Voz	Vpz	Vdz	Vdzm	Zp	Fa	Fb	Fc	Ps	D	Vou	Vps	Xs	Zp(max)	Ev	Vot
Household Goods Storage	4850	2	0	0.12	0	582	582	6500	6500	3250	0.18	1	1	1								
															2	1	582	6500	0.09	0.18	0.9	647