

14.0 Appendix B – Existing VAV Unit Ventilation Requirements

RTU-1

Space Number	Space Name	Area	Occupancy	Rp	Ra	Vpz	Design Occupancy	Vbz	Voz	Ez	Zp	Notes
021	MCC	347	other/lab	10	0.12	230	1	51.64	51.64	1.00	0.22	
022	Trovalistion	659	other/lab	10	0.12	230	4	119.08	119.08	1.00	0.52	
023	Sand Blasting	308	other/lab	10	0.12	145	2	56.96	56.96	1.00	0.39	
024	Washing	920	office	5	0.06	255	6	85.20	85.20	1.00	0.33	
025	Clean Room	1885	other/lab	10	0.12		5	276.20	276.20	1.00	0.00	
027	Sand Blasting	253	other/lab	10	0.12		2	50.36	50.36	1.00	0.00	
028	Corridor	999	corridor	0	0.06	230	0	59.94	59.94	1.00	0.26	
029	Corridor	469	corridor	0	0.06	145	0	28.14	28.14	1.00	0.19	
030	Purified Water	427	other/lab	10	0.12	145	1	61.24	61.24	1.00	0.42	
031	Final Washing	296	office	5	0.06	80	2	27.76	27.76	1.00	0.35	
032	Storage	571	storage	0	0.12	145	1	68.52	68.52	1.00	0.47	
033	Locker Room	173	health club	20	0.06	80	1	30.38	30.38	1.00	0.38	
034	Packaging	2701	office	5	0.06	720	15	237.06	237.06	1.00	0.33	
035	Office	167	office	5	0.06	80	1	15.02	15.02	1.00	0.19	
036	Warehouse	2761	warehouse	0	0.06	880	10	165.66	165.66	1.00	0.19	
038	Office	167	office	5	0.06	80	1	15.02	15.02	1.00	0.19	
039	Promotional Storage	248	storage	0	0.12	80	0	29.76	29.76	1.00	0.37	
040	Corridor	984	corridor	0	0.06	605	0	59.04	59.04	1.00	0.10	
043	Measurement Dev. Mgt.	393	office	5	0.06	145	1	28.58	28.58	1.00	0.20	
044	Measurement	117	office	5	0.06	80	1	12.02	12.02	1.00	0.15	
045	Quality Assurance	1158	office	5	0.06	360	10	119.48	119.48	1.00	0.33	
047	Tools Mgmt.	393	office	5	0.06	145	1	28.58	28.58	1.00	0.20	
048	Corridor	861	corridor	0	0.06	775	0	51.66	51.66	1.00	0.07	
050	Corridor	932	corridor	0	0.06	620	0	55.92	55.92	1.00	0.09	
055	Secondary Manuf. Oper.	1947	office	5	0.06	650	16	196.82	196.82	1.00	0.30	
056	Laser Engrav.	417	office	5	0.06	145	3	40.02	40.02	1.00	0.28	
057	Control Robot	367	other/lab	10	0.12	145	3	74.04	74.04	1.00	0.51	
058	Open Office	1302	office	5	0.06	450	10	128.12	128.12	1.00	0.28	

Space Number	Space Name	Area	Occupancy	Rp	Ra	Vpz	Design Occupancy	Vbz	Voz	Ez	Zp	Notes
059	Meeting Room	412	conference/meeting	5	0.06	195.7	16	104.72	104.72	1.00	0.54	Max Zp
060	Storage	140	storage	0	0.12	34.3	1	16.80	16.80	1.00	0.49	
063	Storage	1520	storage	0	0.12	360	1	182.40	182.40	1.00	0.51	
157	AV Storage	224	storage	0	0.12	145	0	26.88	26.88	1.00	0.19	
T04	SE Men	262	toilet			75	4	0.00	0.00	1.00	0.00	
T05	SE Women	240	toilet			75	4	0.00	0.00	1.00	0.00	
M43	Corridor	293	corridor	0	0.06	33	0	17.58	17.58	1.00	0.53	
M44	Lab	187	office	5	0.06	21	0	11.22	11.22	1.00	0.53	
M45	Server Room	528	office	5	0.06	60	0	31.68	31.68	1.00	0.53	
M49	MER	268	office	5	0.06	31	0	16.08	16.08	1.00	0.52	
ΣRpPs	615.00											
ΣRaAz	1964.58											
D	1											
Vou	2580											
Max Zp	0.54											
Ev	0.60											
Vot	4299											

RTU-2

Space Number	Space Name	Area	Occupancy	Rp	Ra	Vpz	Design Occupancy	Vbz	Voz	Ez	Zp	Notes
116	Corridor	260	corridor	0	0.06	55.8	0	15.60	15.60	1.00	0.28	
124	Corridor	275	corridor	0	0.06	230	0	16.50	16.50	1.00	0.07	
125	Waiting	332	reception area	5	0.06	330	4	39.92	39.92	1.00	0.12	
126	Reception	326	reception area	5	0.06	330	2	29.56	29.56	1.00	0.09	
127	Dressing	160	office	5	0.06	80	1	14.60	14.60	1.00	0.18	
128	Diagnostic Business Office	191	corridor	5	0.06	145	2	21.46	21.46	1.00	0.15	
130	Recovery	104	office	5	0.06	57	2	16.24	16.24	1.00	0.28	
131	Corridor	325	corridor	0	0.06	88.6	0	19.50	19.50	1.00	0.22	
132	Diagnostic	206	office	5	0.06	162.5	2	22.36	22.36	1.00	0.14	
133	Vacuum Pump room	74	office	5	0.06	84.4	0	4.44	4.44	1.00	0.05	
135	Diagnostic Xray	97	office	5	0.06	51.8	1	10.82	10.82	1.00	0.21	
136	Consultation Office	208	office	5	0.06	162.5	2	22.48	22.48	1.00	0.14	
137	Meeting Room	1000	conference/meeting	5	0.06	402.5	20	160.00	160.00	1.00	0.40	
138	Corridor	280	corridor	0	0.06	93.2	0	16.80	16.80	1.00	0.18	
139	Clean Sterilization	97	office	5	0.06	44.6	1	10.82	10.82	1.00	0.24	
140	Dental Operator	233	office	5	0.06	145	3	28.98	28.98	1.00	0.20	
141	Reading Room	147	office	5	0.06	145	1	13.82	13.82	1.00	0.10	
142	Clean Sterilization	97	office	5	0.06	44.6	1	10.82	10.82	1.00	0.24	
143	Dental Operator	237	office	5	0.06	230	3	29.22	29.22	1.00	0.13	
144	Corridor	269	corridor	0	0.06	145	0	16.14	16.14	1.00	0.11	
145	Meeting Room	145	conference/meeting	5	0.06	145	13	73.70	73.70	1.00	0.51	
147	Tech	560	office	5	0.06	325	5	58.60	58.60	1.00	0.18	
148	Storage	285	storage	0	0.12	80	0	34.20	34.20	1.00	0.43	
149	Corridor	236	corridor	0	0.06	80	0	14.16	14.16	1.00	0.18	
150	Prep	580	office	5	0.06	325	4	54.80	54.80	1.00	0.17	
152	Casting	154	office	5	0.06	80	0	9.24	9.24	1.00	0.12	
153	Simulation Lab	1750	office	5	0.06	600	14	175.00	175.00	1.00	0.29	
154	Corridor	311	corridor	0	0.06	100.4	0	18.66	18.66	1.00	0.19	
155	Storage	130	storage	0	0.12	44.6	0	15.60	15.60	1.00	0.35	
160	Corridor	769	corridor	0	0.06	289.1	0	46.14	46.14	1.00	0.16	
161	Corridor	981	corridor	0	0.06	390	0	58.86	58.86	1.00		
162	Library	582	library	5	0.12	230	10	119.84	119.84	1.00	0.29	

Space Number	Space Name	Area	Occupancy	Rp	Ra	Vpz	Design Occupancy	Vbz	Voz	Ez	Zp	Notes
163	Break-out Area	2839	reception area	5	0.06	780	40	370.34	370.34	1.00		
164	Food Service	858	dining	7.5	0.18	390	25	341.94	341.94	1.00		
166	Concierge	511	reception area	5	0.06	195	20	130.66	130.66	1.00	0.54	Max Zp
167	Seating Alcove	296	reception area	5	0.06	195	10	67.76	67.76	1.00		
168	Display	120	reception area	5	0.06	195	5	32.20	32.20	1.00		
165	Pantry	181	dining	7.5	0.18	80	0	32.58	32.58	1.00	0.41	
169	Corridor	1557	corridor	0	0.06	360	0	93.42	93.42	1.00	0.26	
170	Stor. Lit.	122	storage	0	0.12	80	0	14.64	14.64	1.00	0.18	
171	Events Coord.	750	office	5	0.06	230	4	65.00	65.00	1.00	0.28	
172	Office	132	office	5	0.06	80	2	17.92	17.92	1.00	0.22	
175	AV Closet	12	storage	0	0.12	57.5	0	1.44	1.44	1.00	0.03	
T06	Existing SW Women	379	toilet			75	6	0.00	0.00	1.00	0.00	
T07	Existing SW Men	407	toilet			75	7	0.00	0.00	1.00	0.00	
T09	NW Men	308	toilet			94.1	5	0.00	0.00	1.00	0.00	
T10	NW Women	332	toilet			94.1	5	0.00	0.00	1.00	0.00	
T11	Janitor	42	storage	0	0.12	37.6	0	5.04	5.04	1.00	0.13	
T12	Men's Shower	311	toilet				0					
T13	Women's Shower	248	toilet				0					
ΣRpPs	1047.50											
ΣRaAz	1324.32											
Vou	2372											
Max Zp	0.54											
Ev	0.60											
Vot	3953											

RTU-3

Space Number	Space Name	Area	Occupancy	Rp	Ra	Vpz	Design Occupancy	Vbz	Voz	Ez	Zp	Notes
158	Auditorium	1875	auditorium	5	0.06	3200	150	862.50	862.50	1.00	0.27	Max Zp
159	Control Room	153	office	5	0.06	350	1	14.18	14.18	1.00	0.04	
Σ RpPs		755.00										
Σ RaAz		121.68										
D		1										
Vou		877										
Max Zp		0.27										
Ev		0.8										
Vot		1096										

RTU-4

Space Number	Space Name	Area (sq ft)	Occupancy	Rp	Ra	Design Occupancy	Vbz	Voz	Ez	Zp	Notes
M01	Lobby	593	main entry lobby	5	0.06	4	55.58	55.58	1.00	0.38	
M02	Board Room	553	conference/meeting	5	0.06	27	168.18	168.18	1.00	0.47	Max Zp
M03	Reception	515	reception area	5	0.06	3	45.90	45.90	1.00	0.14	
M04	Chariman Office	274	office	5	0.06	2	26.44	26.44	1.00	0.14	
M05	COO Office	275	office	5	0.06	1	21.50	21.50	1.00	0.11	
M06	Administrative	272	office	5	0.06	1	21.32	21.32	1.00	0.11	
M07	CEO Office	542	office	5	0.06	2	42.52	42.52	1.00	0.18	
M08	Exhibition Area	672	reception area	5	0.06	8	80.32	80.32	1.00	0.37	
M09	Pantry	108	office	5	0.06	2	16.48	16.48	1.00		
M11	Legal Office	172	office	5	0.06	1	15.32	15.32	1.00	0.19	
M12	VP office	172	office	5	0.06	1	15.32	15.32	1.00	0.21	
M13	VP office	172	office	5	0.06	1	15.32	15.32	1.00	0.21	
M14	Copy/Equipment	156	office	5	0.06	1	14.36	14.36	1.00	0.18	
M15	Corridor	977	corridor	0	0.06	0	58.62	58.62	1.00	0.18	
M16	Open Office	3103	office	5	0.06	21	291.18	291.18	1.00	0.34	
M17	Meeting Room	357	conference/meeting	5	0.06	10	71.42	71.42	1.00	0.31	
M19	Coats	148	office	5	0.06	2	18.88	18.88	1.00	0.24	
M20	Office	164	office	5	0.06	1	14.84	14.84	1.00	0.20	
M21	Office	164	office	5	0.06	1	14.84	14.84	1.00	0.20	
M22	Open Office	2868	office	5	0.06	25	297.08	297.08	1.00	0.37	
M23	Operations Manager Office	198	office	5	0.06	1	16.88	16.88	1.00	0.33	
M23A	Accounting Office	198	office	5	0.06	1	16.88	16.88	1.00	0.24	
M24	Office	162	office	5	0.06	1	14.72	14.72	1.00	0.20	
M25	Electric Room	135	storage	0	0.12	0	16.20	16.20	1.00	0.11	
061	Coffee Station	352	office	5	0.06	3	36.12	36.12	1.00	0.25	
101	Main Lobby	1767	main entry lobby	5	0.06	8	146.02	146.02	1.00	0.18	
102	Reception	395	reception area	5	0.06	8	63.70	63.70	1.00	0.21	
103	Reception Office	157	reception area	5	0.06	1	14.42	14.42	1.00	0.10	
104	Alcove	131	reception area	5	0.06	0	7.86	7.86	1.00	0.00	
105	Open Office	745	office	5	0.06	11	99.70	99.70	1.00	0.22	

Space Number	Space Name	Area (sq ft)	Occupancy	Rp	Ra	Design Occupancy	Vbz	Voz	Ez	Zp	Notes
106	Office	165	office	5	0.06	1	14.90	14.90	1.00	0.10	
107	Office	246	office	5	0.06	1	19.76	19.76	1.00	0.11	
108	Copy/File Area	508	office	5	0.06	0	30.48	30.48	1.00	0.13	
109	Meeting Room	240	conference/meeting	5	0.06	12	74.40	74.40	1.00	0.45	
110	Meeting Room	464	conference/meeting	5	0.06	22	137.84	137.84	1.00	0.20	
111	Alcove	312	reception area	5	0.06	2	28.72	28.72	1.00	0.44	
112	Corridor	1255	corridor	0	0.06	0	75.30	75.30	1.00	0.31	
113	Corridor	319	corridor	0	0.06	0	19.14	19.14	1.00	0.00	
114	First Aid	290	office	5	0.06	1	22.40	22.40	1.00	0.15	
115	Alcove	361	reception area	5	0.06	3	36.66	36.66	1.00	0.25	
117	Mail	212	office	5	0.06	2	22.72	22.72	1.00	0.28	
118	Print Room	315	office	5	0.06	6	48.90	48.90	1.00	0.21	
119	Server Room	556	storage	0	0.12	1	66.72	66.72	1.00	0.00	
120	Tel/Data	167	storage	0	0.12	0	20.04	20.04	1.00	0.00	
121	Electric Room	146	storage	0	0.12	0	17.52	17.52	1.00	0.00	
122	Corridor	97	corridor	0	0.06	1	5.82	5.82	1.00	0.22	
123	Coats/Luggage	274	reception area	5	0.06	2	26.44	26.44	1.00	0.22	
T01	Existing SE Men	354				5	0.00	0.00	1.00	0.00	
T02	Existing SE Women	359				4	0.00	0.00	1.00	0.00	
ΣRpPs	1000.00										
ΣRaAz	1405.68										
D	1										
Vou	2406										
Max Zp	0.47										
Ev	0.60										
Vot	4009										

RTU-5

Space Number	Space Name	Area	Occupancy	Rp	Ra	Vpz	Design Occupancy	Vbz	Voz	Ez	Zp	Notes
002	Prototyping & Engin. Workshop	2299	other/lab	10	0.12	1920	19	465.88	465.88	1.00	0.24	
003	Office	782	office	5	0.06	292.5	6	76.92	76.92	1.00	0.26	
004	Corridor	131	corridor	0	0.06	32.5	0	7.86	7.86	1.00	0.24	
005	Meeting Room	272	conference/meeting	5	0.06	175	10	66.32	66.32	1.00	0.38	
006	Meeting Room	264	conference/meeting	5	0.06	145	10	65.84	65.84	1.00	0.45	
007	Raw Material Stock & Prep	554	other/lab	10	0.12	343.3	9	156.48	156.48	1.00	0.46	
008	Holding Warehouse	667	warehouse	0	0.06	171.7	0	40.02	40.02	1.00	0.23	
009	Tel/Data	263	storage	0	0.12	145	0	31.56	31.56	1.00	0.22	
010	Oil Storage	776	other/lab	10	0.12	325	6	153.12	153.12	1.00	0.47	Max Zp
011	Shipping Dock	587	shipping/receiving	0	0.12	210	4	70.44	70.44	1.00	0.34	
012	Receiving Office	248	office	5	0.06	230	3	29.88	29.88	1.00	0.13	
013	Trash	361	other/lab	10	0.12	150	0	43.32	43.32	1.00	0.29	
014	Acid Storage	262	other/lab	10	0.12	172.5	0	31.44	31.44	1.00	0.18	
015	Receiving Dock	841	shipping/receiving	0	0.12	325	6	100.92	100.92	1.00	0.31	
016	Entry Vestibule	324	main entry lobby	5	0.06	230	0	19.44	19.44	1.00	0.08	
017	Men's Locker	826	health club	20	0.06	445	8	209.56	209.56	1.00	0.47	
018	Women's Locker	761	health club	20	0.06	445	6	165.66	165.66	1.00	0.37	
020	Corridor	659	corridor	0	0.06	145	0	39.54	39.54	1.00	0.27	
ΣRpPs	765.00											
ΣRaAz	1009.20											
D	1											
Vou	1774											
Max Zp	0.47											
Ev	0.60											
Vot	2957											

RTU-6

Space Number	Space Name	Area (sq ft)	Occupancy	Rp	Ra	Vpz	Design Occupancy	Vbz	Voz	Ez	Zp	Notes
M15	Corridor	529	corridor	0	0.06	179.4	0	31.74	31.74	1.00	0.18	
M26	Coffee Area	326	office	5	0.06	325	4	39.56	39.56	1.00	0.12	
M28	Copy/Equipment	256	office	5	0.06	145	1	20.36	20.36	1.00	0.14	
M29	Storage	150	storage	0	0.12	50.6	0	18.00	18.00	1.00	0.36	
M30	Tele/Data	189	storage	0	0.12	145	0	22.68	22.68	1.00	0.16	
M31	Office	213	office	5	0.06	50	1	17.78	17.78	1.00	0.36	
M32	Office	169	office	5	0.06	50	1	15.14	15.14	1.00	0.30	
M33	Office	169	office	5	0.06	48.3	1	15.14	15.14	1.00	0.31	
M34	Office	169	office	5	0.06	48.3	1	15.14	15.14	1.00	0.31	
M35	Office	169	office	5	0.06	48.3	1	15.14	15.14	1.00	0.31	
M36	Office	165	office	5	0.06	48.3	1	14.90	14.90	1.00	0.31	
M37	Office	166	office	5	0.06	48.3	1	14.96	14.96	1.00	0.31	
M38	Office	166	office	5	0.06	48.3	1	14.96	14.96	1.00	0.31	
M39	Open Office	5869	office	5	0.06	2035	54	622.14	622.14	1.00	0.31	
M40	Open Office	3929	office	5	0.06	1665	31	390.74	390.74	1.00	0.23	
M41	Meeting Room	179	conference/meeting	5	0.06	145	6	40.74	40.74	1.00	0.28	
M42	Meeting Room	263	conference/meeting	5	0.06	145	8	55.78	55.78	1.00	0.38	Max Zp
M43	Corridor	534	corridor	0	0.06	230	0	32.04	32.04	1.00	0.14	
T14	Existing SW Women	302	no sa required			72.5		0.00	0.00	1.00	0.00	
T15	Existing SW Men	304	no sa required			72.5		0.00	0.00	1.00	0.00	
ΣRpPs	560.00											
ΣRaAz	836.94											
D	1.00											
Vou	1397											
Max Zp	0.38											
Ev	0.7											
Vot	1996											