



- DRAWING NOTES:**
- BALANCE EXISTING AIR DEVICE TO INDICATED AIR FLOW.
 - REFER TO PART SECOND FLOOR PLAN (DIPC) - NEW WORK - HVAC; DRAWING M103, FOR CONTINUATION.

PART SECOND FLOOR ROOF PLAN - NEW WORK - HVAC
SCALE: 1/8" = 1'-0"

SPACE DATA								DENTAL CLINIC								MAX SUPPLY AIR DATA				ENGINEERED DESIGN					
Room Number	Room Name	Room Codes	Area (sf)	Occupancy	Ceiling Ht. (ft)	Return/ Exhaust	Room Pressure (UFC)	Outside Air Changes (UFC)	OACH Air Flow (cfm)	Rp	Ra	ASHRAE 62.1 OA (cfm)	OA Required	Total Air Changes (UFC)	Total Air Changes Plus 10% (UFC)	ACH Air Flow (cfm)	Cooling Load Air Flow (cfm) (Note 1)	Design Max SA (cfm)	Existing SA	Design RA (cfm)	Existing RA	Design General EA (cfm)	Existing EA		
B197	STERILE	DNSC6	124	0	9	RA	POS	2	40	-	-	-	40.0	6	6.6	125	60	125	280	50	UNKNOWN	0	UNKNOWN		
B205	DECON	DNSC4	124	2	9	EA	NEG NEG	2	40	-	-	-	40.0	10	11	205	423	425	300	0	UNKNOWN	625	UNKNOWN		
B212	CLEAN	DNSC5	295	2	9	RA	POS POS	2	90	-	-	-	90.0	6	6.6	295	968	970	1060	390	UNKNOWN	390	UNKNOWN		
TOTALS:			543										170					1,520	1,640	440	0	1,015	0		

NOTES:

- LOAD CALCULATIONS BASED ON TRANE TRACE 700 VERSION 6.3.1 SOFTWARE.

AIR HANDLING UNIT AHU-1																							
SPACE DATA							OUTSIDE AIR DATA							MAX SUPPLY AIR DATA				ENGINEERED DESIGN					
Room Number	Room Name	Room Codes	Area (sf)	Occupancy	Ceiling Ht. (ft)	Return/ Exhaust	Room Pressure (UFC)	Outside Air Changes (UFC)	OACH Air Flow (cfm)	Rp	Ra	ASHRAE 62.1 OA (cfm)	OA Required	Total Air Changes (UFC)	Total Air Changes Plus 10% (UFC)	ACH Air Flow (cfm)	Cooling Load Air Flow (cfm) (Note 1)	Design Max SA (cfm)	Existing SA	Design RA (cfm)	Existing RA	Design General EA (cfm)	Existing EA
115	TOILET / SHOWER	TLTS1	30	0	8.0	EA	NEG	0	0	-	-	-	0.0	10	11	45	13	50	50	0	0	100	UNKNOWN
116	STORAGE	SRE01	7	0	9.0	RA	-	-	-	0	0.12	0.8	0.8	-	-	-	3	0	0	0	0	0	0
117	MWD EXAM	VEX02	213	2	9.0	EA	NEG	2	65	-	-	-	65.0	4	4.4	145	90	145	120	0	190	160	0
118	KENNEL	VKEN1	96	6	9.0	EA	NEG	5	75	-	-	-	75.0	10	11	160	18	145	110	0	0	160	0
119	X-RAY	VXER1	90	2	9.5	EA	-	2	30	-	-	-	30.0	4	4.4	65	170	170	-	0	-	170	-
120	VESTIBULE	LOB02	34	0	8.0	RA	POS	-	-	0	0.06	2.0	2.0	-	-	-	49	50	40	0	0	45	0
123	CORRIDOR	-	145	0	8.0	RA	-	-	-	0	0.06	8.7	8.7	-	-	-	240	240	-	0	-	255	-
124	DENTAL/SURGERY PREP	VSPD1	240	3	9.0	EA	POS	2	75	-	-	-	75.0	6	6.6	240	275	275	120	0	190	245	0
125	SURGERY	VS001	221	3	10.0	EA	POS	7.5	280	-	-	-	280.0	15	16.5	610	285	610	160	0	160	410	UNKNOWN
TOTALS:			1,076										537					1,685	600	0	540	1,545	0

NOTES:

- LOAD CALCULATIONS BASED ON TRANE TRACE 700 VERSION 6.3.1 SOFTWARE.
- AHU-1 RECEIVES AN ADDITIONAL 140 CFM OF EXHAUST AIR FROM THE FOLLOWING ROOMS SERVED OFF OF AHU-2: TOILET RM. 112 AND HSKP. RM. 114.

AIR HANDLING UNIT AHU-2																							
SPACE DATA							OUTSIDE AIR DATA							MAX SUPPLY AIR DATA				ENGINEERED DESIGN					
Room Number	Room Name	Room Codes	Area (sf)	Occupancy	Ceiling Ht. (ft)	Return/ Exhaust	Room Pressure (UFC)	Outside Air Changes (UFC)	OACH Air Flow (cfm)	Rp	Ra	ASHRAE 62.1 OA (cfm)	OA Required	Total Air Changes (UFC)	Total Air Changes Plus 10% (UFC)	ACH Air Flow (cfm)	Cooling Load Air Flow (cfm) (Note 1)	Design Max SA (cfm)	Existing SA	Design RA (cfm)	Existing RA	Design General TEA (cfm)	Existing EA
101	MECHANICAL	MECH1	99	0	9.0	RA	-	-	-	0	0.12	11.9	11.9	-	-	-	300	300	0	200	0	0	0
102	WAITING	WRC01	189	11	9.0	RA	-	1	30	-	-	-	30.0	6	6.6	190	217	220	380	0	515	0	0
103	VESTIBULE	LOB02	36	0	8.0	RA	POS	-	-	0	0.06	2.2	2.2	-	-	-	48	50	55	45	0	0	0
104	WASH ROOM	-	32	0	8.0	RA	-	-	-	0	0.12	3.8	3.8	-	-	-	50	50	80	50	80	0	0
104A	COMM.	COMC1	23	0	9.0	RA	POS	0	0	-	-	-	0.0	1	1.1	5	50	50	0	45	0	0	0
105	EXAM	VEX01	101	2	9.0	EA	-	2	35	-	-	-	35.0	4	4.4	70	185	185	145	0	145	185	0
106	BREAK ROOM	SL001	150	6	8.0	RA	-	-	-	7.5	0.18	72.0	72.0	-	-	-	230	230	235	230	235	0	0
108A	OFFICE	OFA01	81	1	8.0	RA	-	-	-	5	0.06	9.9	9.9	-	-	-	210	210	125	210	125	0	0
108B	OFFICE	OFA01	81	1	8.0	RA	-	-	-	5	0.06	9.9	9.9	-	-	-	190	190	125	190	125	0	0
109	EXAM	VEX01	109	2	9.0	EA	-	2	35	-	-	-	35.0	4	4.4	75	205	205	165	0	165	205	0
110	LAB / PHARMACY	VPH01	102	1	9.0	RA	POS	2	35	-	-	-	35.0	4	4.4	70	320	320	155	290	155	0	0
111	RECEPTION	RECP1	123	1	9.0	RA	-	-	-	5	0.06	12.4	12.4	-	-	-	90	90	295	0	255	0	0
112	TOILET	TLTU1	59	0	8.0	EA	NEG	0	0	-	-	-	0.0	10	11	90	9	0	65	0	0	90	UNKNOWN
113	ELEC	MECH1	22	0	9.0	RA	-	-	-	0	0.12	2.6	2.6	-	-	-	25	25	20	0	0	0	0
114	HSKP.	JANC1	11	0	8.0	EA	NEG	0	0	-	-	-	0.0	10	11	20	5	0	20	0	0	50	0
121	CORRIDOR	-	228	0	8.0	RA	-	-	-	0	0.06	13.7	13.7	-	-	-	45	50	175	0	0	0	0
122	CORRIDOR	-	59	0	8.0	RA	-	-	-	0	0.06	3.5	3.5	-	-	-	19	50	-	0	-	0	-
TOTALS:			1,483										274					2,200	2,040	1,260	1,800	530	0

NOTES:

- LOAD CALCULATIONS BASED ON TRANE TRACE 700 VERSION 6.3.1 SOFTWARE.

Supply	1,685
Return	0
Exhaust	1,545
Pressurization	140
Pressurization %	8.31%

Supply	2,200
Return	1,260
Exhaust	530
Pressurization	410
Pressurization %	18.64%

AS-BUILT DOCUMENTS



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**VET CLINIC & DIPC RENOVATIONS
/ REPAIR VETERINARY
TREATMENT FACILITY**

ISSUE DATE: 8/16/19	DRAWN BY: JSF	CHECKED BY: TJM
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DRAWING TITLE:
**PART PLANS &
VENTILATION SCHEDULES**

PROJECT NUMBER: 18-390-00	DRAWING NUMBER: M109
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