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OUTSIDE AIR MECHANICAL CODE AND OAR CODE ANALYSIS

UNIT	ROOM	REMARKS	MECH CODE CLASSIFICATION	SPACE AREA (FT^2) - Az	OCCUPANCY (PEOPLE / 1000FT^2)	PLUMBING FIXTURES	OSA CFM / PERSON (FIXTURE) - Rp	OSA CFM/FT^2 - Ra	EA REQUIRED CFM / FIXTURE OR SF	CODE PEOPLE	DESIGN PEOPLE (FIXTURE) Pz	OCCUPANT OSA CFM VBzp =Rp*Pz	AREA OSA CFM Vbza =Ra*Az	MECH CODE REQUIRED EXHAUST CFM	PROVIDED 100% EXHAUST CFM (2)	REQUIRED OSA CFM Vbz =Sum(Vbz)	MECH CODE REQ'D OSA CFM Voz =(Vbz)/Ez	MAXIMUM PROVIDED ROOM SUPPLY AIR CFM	MINIMUM PROVIDED OSA SUPPLY AIR CFM Vpz	ZONE EFFECT. FACTOR Ez(3)	MAXIMUM OUTDOOR AIR FRACTION Zp =Voz/Vpz	SYSTEM VENTILATION EFFICIENCY AT MAX Zp - Ev (4)	OCCUPANT DIVERSITY - D =Ps/(sum Pz)	UNCORREC OA INTAKE - Vou = DxSum(Rp x Pz)+Sum(Ra x Az)	MIN CODE OUTDOOR AIR CFM - Vot = Vou / Ev	OUTDOOR AIR INTAKE CFM - Vot	PROVIDED MINIMUM OSA CFM (1)
	011 - Hall		CORRIDOR	107	5		0	0.06	0	1	0	0	6	0	0	6	8	300	300	0.8	3%						
	020 - Vitals		CORRIDOR	43	5		0	0.06	0	0	0	0	3	0	0	3	4	290	290	0.8	1%						
FCU-211	TOTALS			150						1	0	0	9	0	0	9	11.25	590	590	0.8	3%	1	0.9	9	9	9	20
	021 - Behavorial		PROCEDURE	101	20		15	0	0	2	2	30	0	0	0	30	38	230	230	0.8	16%						
	022 - Behavorial		PROCEDURE	101	20		15	0	0	2	2	30	0	0	0	30	38	220	220	0.8	17%						
	023 - Exam		PROCEDURE	100	20		15	0	0	2	2	30	0	0	0	30	38	190	190	0.8	20%						
FCU-223	TOTALS			302						6	6	90	0	0	0	90	113	630	630	0.8	20%	0.95	0.9	81	85	85	90
	024 - Dental		PROCEDURE	97	20		15	0	0	2	2	30	0	0	0	30	40	230	230	0.8	17%						
	025 - Dental		PROCEDURE	101	20		15	0	0	2	2	30	0	0	0	30	38	240	240	0.8	16%						
	031 - Patient Toilet		TOILET	54	20	1	0	0	70	0	1	0	0	70	140	0	0	90	90	0.8							
FCU-225	TOTALS			252						4	5	60	0	70	140	60	78	550	550	0.8	17%	0.95	0.9	54	57	70	70
	013 - Hall		CORRIDOR	205	5		0	0.06	0	0	1	0	20	0	0	20	25	120	120	0.8	21%						
	028 - Staff Break		CAFETERIA	216	100		7.5	0.18	0	11	11	82.5	38.9	0	150	121.4	152	460	460	0.8	33%						
	029 - Office		OFFICE	105	5		5	0.06	0	1	1	5	6.3	0	0	11.3	14	110	110	0.8	13%						
	102 - Gas Storage		STORAGE-HAZARDOUS	15	-		0	0	1	0	0	0	0	20	50	0	0	0	0	0.8							
FCU-227	TOTALS			541						12	13	87.5	65.2	20	200	153	191	680	680	0.8	33%	0.8	0.8	135	169	169	170
	012 - Hall		CORRIDOR	241	5		0	0.06	0	0	1	0	14.5	0	0	14.5	18	90	90	0.8	20%						
	026 - Panorex		PROCEDURE	28	20		15	0	0	1	1	15	0	0	0	15	20	80	80	0.8	25%						
	027 - Dental Equip		UTILITY	43	-		0	0	0.75	0	0	0	0	30	50	0	0	0	0	0.8							
	032 - Dental		PROCEDURE	100	20		15	0	0	2	2	30	0	0	0	30	40	130	130	0.8	31%						
	033 - Dental		PROCEDURE	100	20		15	0	0	2	2	30	0	0	0	30	40	130	130	0.8	31%						
	034 - Exam		PROCEDURE	101	20		15	0	0	2	2	30	0	0	0	30	40	110	110	0.8	36%						
	035 - Exam		PROCEDURE	101	20		15	0	0	2	2	30	0	0	0	30	40	110	110	0.8	36%						
	036 - Behavorial		PROCEDURE	101	20		15	0	0	2	2	30	0	0	0	30	38	110	110	0.8	35%						
FCU-236	TOTALS			815						11	12	165	14.5	30	50	180	236	720	720	0.8	36%	0.75	0.9	163	217	217	220
	010 - Entry		CORRIDOR	84	5		0	0.06	0	0	0	0	5	0	0	5	10	310	310	0.8	3%						
FC- 110	TOTALS			84						0	0	0	5	0	0	5	10	310	310	0.8	3%	1	0.9	5	5	5	10

NOTES:

(1) OUTDOOR AIR SUPPLIED FROM EXISTING 100 % OUTDOOR AIR HEAT RECOVERY VENTILATOR UNIT.
(2) ADDITIONAL EXHAUST AIR WILL BE PROVIDE BY TRANSFER ROOM AIR NOT OSA.
(3) CEILING SUPPLY OF COOL AIR
(4)
(5) ADDITIONAL OUTSIDE AIR REQUIRED TO PROVIDE AIR FOR SPACE PRESSURIZATION AND REPLENISH EXHAUSTED AIRFLOW.
(6) SPACE MUST BE NEGATIVE TO THE SURROUNDING SPACES.
(7) SUPPLY AND OUTSIDE AIR PROVIDED FROM THE MAIN ADJOINING SPACE
(8) KITCHEN EXHAUST IS INTERMITTENT, NO MAKE-UP AIR PROVIDED

EXISTING BUILDING FAN COIL SCHEDULE-USE FOR AIR BALANCING ONLY

SYMBOL	AREA SERVED	HEAT PUMP UNIT	AIR FLOW (CFM)	MIN OSA (CFM)	FAN E.S.P. (IN.H20)	COOLING TOTAL (MBH)	COOLING SENS. (MBH)	COOLING ENT. AIR (F DB)	COOLING ENT. AIR (F WB)	HEATING ENT. AIR (MBH)	HEATING HEATING (MBH)	HEATING AUX. HEATING	BASIS OF DESIGN	MAX. WT. (LBS)	ELECTRICAL VOLT/PH	ELECTRICAL MCA
FC-1	STAFF LOUNGE	AC-1	300	35	0.40		7.4	75.0	62.0	70.0	4.2	EDH-1	DAIKIN FXMQ09PVJU	60	208/1	0.6
FC-2	EXAM 1,2,3,4	AC-1	680	160	0.40		19.5	75.0	62.0	70.0	9.5	EDH-2	DAIKIN FXMQ24PVJU	80	208/1	1.8
FC-3	OFFICE MANAGER	AC-1	230	20	0.40		1.4	75.0	62.0	70.0	1.5	EDH-3	DAIKIN FXMQ07PVJU	60	208/1	0.6
FC-4	TEAM 1,2 & NURSE STATION	AC-1	300	100	0.40		8.0	75.0	62.0	70.0	7.2	EDH-4	DAIKIN FXMQ09PVJU	60	208/1	0.6
FC-5	RECEPTION	AC-1	1,300	115	0.40		34.0	75.0	62.0	70.0	5.4	EDH-5	DAIKIN FXMQ09PVJU	60	208/1	0.6
FC-6	EXAM 5,6,7,8,9,10 &11	AC-1	300	375	0.40		7.6	75.0	62.0	70.0	3.2	EDH-6	DAIKIN FXMQ48PVJU	110	208/1	3.4
FC-7	LOBBY	AC-1	1,300	220	0.40		38.1	75.0	62.0	70.0	3.3		DAIKIN FXMQ48PVJU	110	208/1	3.4
FC-8	PROCEDURE	AC-1	240	75	0.40		4.7	75.0	62.0	70.0	1.3	EDH-8	DAIKIN FXMQ07PVJU	60	208/1	0.6
FC-9	EXAM 1,2 DR BAILEY OFFICE	AC-1	670	255	0.40		18.4	75.0	62.0	70.0	4.0	EDH-9	DAIKIN FXMQ24PVJU	80	208/1	1.8
FC-10	RETAIL	AC-1	300	145	0.40		9.4	75.0	62.0	70.0	1.1	EDH-10	DAIKIN FXMQ12PVJU	60	208/1	0.6
FC-12	LOBBY	AC-1	2,000	260	0.40		46.9	75.0	62.0	70.0	3.9		DAIKIN FXMQ72PVJU	310	208/1	9.0
FC-13	NURSE STATION	AC-1	300	65	0.40		7.6	75.0	62.0	70.0	2.6	EDH-13	DAIKIN FXMQ09PVJU	60	208/1	0.6
FC-14	EXAM 1,2 DR ROSE OFFICE	AC-1	300	115	0.40		8.6	75.0	62.0	70.0	1.5	EDH-14	DAIKIN FXMQ12PVJU	60	208/1	0.6
FC-15	CONSULT	AC-1	300	65	0.40		8.0	75.0	62.0	70.0	7.7	EDH-15	DAIKIN FXMQ09PVJU	60	208/1	0.6
FC-16	CONFERENCE ROOM B	AC-1	300	100	0.40		6.2	75.0	62.0	70.0	2.1	EDH-16	DAIKIN FXMQ09PVJU	60	208/1	0.6
FC-17	CONFERENCE ROOM A	AC-1	300	100	0.40		6.6	75.0	62.0	70.0	1.1	EDH-17	DAIKIN FXMQ09PVJU	60	208/1	0.6
FC-18	MDF	AC-1	610	20	0.40		11.9	75.0	62.0	70.0	0.7	EDH-18	DAIKIN FXMQ18PVJU	80	208/1	1.6
FC-19	HOSPITAL STORAGE	AC-1	300	50	0.40		6.4	75.0	62.0	70.0	2.9	EDH-19	DAIKIN FXMQ09PVJU	60	208/1	0.6
FC-20	TREATMENT 1,2,3,4	AC-1	600	200	0.40		13.3	75.0	62.0	70.0	1.6	EDH-20	DAIKIN FXMQ18PVJU	80	208/1	1.6
FC-21	STAFF LOUNGE	AC-1	300	85	0.40		8.8	75.0	62.0	70.0	4.5	EDH-21	DAIKIN FXMQ12PVJU	60	208/1	0.6
FC-22	RECEPTION	AC-1	300	50	0.40		10.0	75.0	62.0	70.0	9.5	EDH-22	DAIKIN FXMQ07PVJU	60	208/1	0.6
FC-23	OFFICE 1,2	AC-1	260	90	0.40		3.3	75.0	62.0	70.0	4.1	EDH-23	DAIKIN FXMQ07PVJU	60	208/1	0.6
FC-24	PT GYM	AC-1	660	275	0.40		18.0	75.0	62.0	70.0	14.5	EDH-24	DAIKIN FXMQ24PVJU	80	208/1	1.8

EXISTING HEAT RECOVERY UNIT EQUIPMENT SCHEDULE-USE FOR AIRBALANCING ONLY

SYMBOL	DESCRIPTION	ELECTRICAL
HRU-1	HEAT RECOVERY UNIT WITH DIRECT PROPANE-FIRED REHEAT SUPPLY FAN: 3,500 CFM AT 1.0 IN. E.S.P. WITH VFD EXHAUST FAN: 3,100 CFM AT 1.0 IN. E.S.P. WITH VFD HEATER: INDIRECT GAS-FIRED; STAINLESS STEEL HEAT EXCHANGER HEATING: 75 F LAT; 148 MBH OUTPUT CAPACITY., MIN. 80% EFFICIENCY, 2 PSI GAS PRESSURE DX COOLING COIL; SPLIT SYSTEM; PROVIDE WITH STAINLESS STEEL DRAIN PAN. COOLING: EAT 84/62, LAT 68/58.5, 12 MAX FPI, SENSIBLE HEAT RECOVERY WHEEL SUMMER PERFORMANCE: 94/66 EAT, 75/62 RAT, 84/62.7 LAT, 87.5/66.2 EAT SENSIBLE HEAT RECOVERY WHEEL WINTER PERFORMANCE: -10 EAT, 70 RAT, 30 LAT, 25 EAT PROVIDE ECONOMIZER, HEAT WHEEL FROST SENSOR, MOTOR STARTER, DISCHARGE AIR TEMPERATURE GAS CONTROL SYSTEMS, CONVENIENCE OUTLET, INTERLOCK RELAYS. PROVIDE 2 IN MERV 8 FILTER ON OSA AND 2 IN MERV 8 FILTER ON RETURN AIR TO PROTECT HEAT RECOVERY WHEEL PROVIDE 4 IN MERV 13 FILTER ON SUPPLY AIR ALL PREMIUM EFFICIENCY MOTORS APPROXIMATE OPERATING WEIGHT: 2000 LB. BASIS OF DESIGN: AAON RN-009	208 V/ 3 PHASE 5 HP SUPPLY FAN MOTOR. 208 V/ 3 PHASE 3 HP EXHAUST FAN MOTOR. UNIT FLA: 30 MCA: 34

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REGISTERED PROFESSIONAL ENGINEER 52786 OREGON JAN. 15, 2019 MARIANA GALOFTEANU
EXPIRES 6/30/19

Wallowa MOB Addition

Wallowa County Healthcare District

603 Medical Pkwy, Enterprise, OR 97828

ISSUE DATE: 02.12.2019

REVISIONS:

1 MISC REV. 02.11.2019

Bid / Permit Set

MECHANICAL SCHEDULES

M0.03

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