2014 OREGON MECHANICAL SPECIALTY CODE VE VENTILATION CHART

SYSTEM TAG	ROOM OR ZONE NAME	OCCUPANCY TYPE TYPE	AREA SQFT	PEOPLE RATE Rp CFM/PERSON	AREA RATE Ra CFM/SQFT	DEFAULT OCCUPANT DENSITY PEOPLE / 1000 SQFT	TOTAL POPULATION PEOPLE	EXHAUST RATE CFM/SQFT	BREATHING ZONE OSA Vbz CFM	DISTRIBUTION EFFECTIVENESS Ez RATIO	ZONE OSA REQUIRED Voz CFM	ZONE OSA PROVIDED Voz CFM	EXHAUST DISTRIBUTION EFFECTIVNESS RATIO	ZONE EXHAUST REQUIRED CFM	ZONE EXHAUST PROVIDED CFM	ZONE TRANSFER AIRFLOW CFM	NOTES
EF-1	PARKING 112	PARKING GARAGE	9,000	-	-	-	-	0.75	-	-	-	-	1.0	6,750	6,800		1
														EF-1=	6,800		
EF-2	TRASH T100	TRASH ROOM	300	-	-	-	-	1.00	-	-	-	-	1.0	300	300		1
EF-2	TRASH T300	TRASH ROOM	60	-	-	-	-	1.00	-	-	-	-	1.0	60	60		1
EF-2	TRASH T400	TRASH ROOM	60	-	-	-	-	1.00	-	-	-	-	1.0	60	60		1
EF-2	TRASH T500	TRASH ROOM	60	-	-	-	-	1.00	-	-	-	-	1.0	60	60		1
EF-2	TRASH T600	TRASH ROOM	60	-	-	-	-	1.00	-	-	-	-	1.0	60	60		1
EF-2	TRASH T700	TRASH ROOM	60	-	-	-	-	1.00	-	-	-	-	1.0	60	60		1
EF-2	TRASH T800	TRASH ROOM	60	-	-	-	-	1.00	-	-	-	-	1.0	60	60		1
														EF-2=	660		
FC 1-2, 1-3	LOBBY 100	LOBBIES/PREFUNCTION (HOTEL)	1,630	7.5	0.06	30	18	-	233	0.8	291	295	-	-	-	-	1, 2
FC 1-2, 1-3	OPEN LEASING 101	OFFICE SPACES	1,250	5.0	0.06	5	7	-	110	0.8	138	140	-	-	-	-	1
											FC 1-2, 1-3 =	435					
FC 1-1	OFFICE 102	OFFICE SPACES	170	5.0	0.06	5	1	-	15	0.8	19	20	-	-	-	-	1
											FC 1-1 =	20					
FC 1-4	MAIL & PACKAGE	CORRIDORS	490	-	0.06	-	-	-	29	0.8	37	40	-	-	-	-	1
FC 1-4	LOBBY 110	CORRIDORS	740	-	0.06	-		-	44	0.8	56	60	-	-	-	-	1
FC 1-4	WORK ROOM 105	OFFICE SPACES	215	5.0	0.06	5	2	-	23	0.8	29	30	-	-	-	-	1
											FC 1-4 =	130					
FC 2-1	AMENITY 210	HEALTH CLUB/WEIGHT ROOM	1,230	20.0	0.06	5	7	-	214	0.8	267	270	-	-	-	-	1
				-	-	-	-	-	-		FC 2-1 =	270	-	-	-	-	1
FC 2-2	CO-WORK 220	OFFICE SPACES	1,790	5.0	0.06	5	9	-	152	0.8	191	195	-	-	-	-	1
				-	-	-	-	-	-		FC 2-2 =	195	-	-	-	-	1
FC 2-3	OFFICE 217	OFFICE SPACES	120	5.0	0.06	5	1	-	12	0.8	15	20	-	-	-	-	1
FC 2-3	OFFICE 223	OFFICE SPACES	60	5.0	0.06	5	1	-	9	0.8	11	15	-	-	-	-	1
FC 2-3	AMENITY 215	OFFICE SPACES	1,365	5.0	0.06	5	7	-	117	0.8	146	150	-	-	-	-	1
FC 2-3	OFFICE 225	OFFICE SPACES	60	5.0	0.06	5	1	-	9	0.8	11	15	-	-	-	-	1
											FC 2-3 =	200					
PTHP	2-BEDROOM RESIDENCE X21	DWELLING UNIT	955	5.0	0.06	5	3	-	72	0.8	90	95	-	-	-	-	1
EFC-1	BIKE STORAGE 204	STORAGE AREAS	3,390	-	0.06	-	-	-	203	1.0	203	205	-	-	-	-	1
											EFC-1 =	205					
RTU-3	CLUBROOM 821	LOBBIES/PREFUNCTION (HOTEL)	1,230	7.5	0.06	30	37	-	351	0.8	439	440	-	-	-	-	1
											RTU-3=	440	-				

NOTES:

1. COMPLIES WITH 2014 OMSC SECTION 403
2. PER SECTION 403.3 OF THE 2014 OMSC, FURNITURE FLOOR PLAN SHEET UTLIZIED FOR ACTUAL OCCUPANCY LOAD.

18S APT. GAS LOADS SUMMARY

RISER [TAG]	UNIT SERVED [#-NAME-TYPE]	TOTAL LOAD [KBTUH]	RISER [TAG]	UNIT SERVED [#-NAME-TYPE]	TOTAL LOAD [KBTUH]	RISER [TAG]	UNIT SERVED [#-NAME-TYPE]	TOTAL LOAD [KBTUH]	RISER [TAG]	UNIT SERVED [#-NAME-TYPE]	TOTAL LOAD [KBTUH]	RISER [TAG]	UNIT SERVED [#-NAME-TYPE]	TOTAL LOAD [KBTUH]
NGX01	303-LOFT-ANSI B	71	NGX07	315-2 BEDROOM-ANSI B	71	NGX13	327-LOFT-ANSI B	71	NGX19	328-LOFT-ANSI B	71	NGX25	302-LOFT-ANSI B	71
	403-LOFT-ANSI B	71		415-2 BEDROOM-ANSI B	71		423-LOFT-ANSI B	71		428-LOFT-ANSI B	71		402-LOFT-ANSI B	71
	526-STUDIO-ANS...	71		532-2 BEDROOM-ANSI B	71		516-1 BEDROOM-ANSI...	71		524-LOFT-ANSI B	71		510-1 BEDROOM-ANS...	71
	626-STUDIO-ANS...	71		632-2 BEDROOM-ANSI B	71		616-1 BEDROOM-ANSI...	71		624-LOFT-ANSI B	71		610-1 BEDROOM-ANS...	71
	726-STUDIO-ANS...	71		732-2 BEDROOM-ANSI B	71		716-1 BEDROOM-ANSI...	71		724-LOFT-ANSI B	71		710-1 BEDROOM-ANS...	71
	803-LOFT-ANSI B	71		815-2 BEDROOM-ANSI B	71		823-LOFT-ANSI B	71		828-LOFT-ANSI B	71		802-LOFT-ANSI B	71
							203-STUDIO	71						
	TOTAL	426		TOTAL	426		TOTAL	497		TOTAL	426		TOTAL	426
NGX02	314-STUDIO-ANS...	71	NGX08	311-LOFT-ANSI B	71	NGX14	323-LOFT-ANSI B	71	NGX20	305-STUDIO-ANSI B	71	NGX26	326-LOFT-ANSI B	71
	414-STUDIO-ANS...	71		411-LOFT-ANSI B	71		427-LOFT-ANSI B	71		405-STUDIO-ANSI B	71		426-LOFT-ANSI B	71
	504-STUDIO-ANS...	71		530-LOFT-ANSI B	71		518-1 BEDROOM-ANSI...	71		527-STUDIO-ANSI B	71		511-LOFT-ANSI B	71
	604-STUDIO-ANS...	71		630-LOFT-ANSI B	71		618-1 BEDROOM-ANSI...	71		627-STUDIO-ANSI B	71		611-LOFT-ANSI B	71
	704-STUDIO-ANS...	71		730-LOFT-ANSI B	71		718-1 BEDROOM-ANSI...	71		727-STUDIO-ANSI B	71		711-LOFT-ANSI B	71
	814-STUDIO-ANS...	71		811-LOFT-ANSI B	71		827-LOFT-ANSI B	71		805-STUDIO-ANSI B	71		814-LOFT-ANSI B	71
	TOTAL	426		TOTAL	426		TOTAL	426		TOTAL	426		TOTAL	426
NGX03	316-STUDIO-ANS...	71	NGX09	308-1 BEDROOM-ANSI B	71	NGX15	329-1 BEDROOM-ANSI...	71	NGX21	309-LOFT-ANSI B	71	NGX27	324-LOFT-ANSI B	71
	416-STUDIO-ANS...	71		408-1 BEDROOM-ANSI B	71		429-1 BEDROOM-ANSI...	71		409-LOFT-ANSI B	71		424-LOFT-ANSI B	71
	503-STUDIO-ANS...	71		507-STUDIO-ANSI B	71		519-LOFT-ANSI B	71		529-STUDIO-ANSI B	71		612-STUDIO-ANSI B	71
	603-STUDIO-ANS...	71		607-STUDIO-ANSI B	71		619-LOFT-ANSI B	71		629-STUDIO-ANSI B	71		712-STUDIO-ANSI B	71
	703-STUDIO-ANS...	71		707-STUDIO-ANSI B	71		719-LOFT-ANSI B	71		729-STUDIO-ANSI B	71		734-STUDIO-ANSI B	71
	816-STUDIO-ANS...	71		808-1 BEDROOM-ANSI B	71		829-1 BEDROOM-ANSI...	71		809-LOFT-ANSI B	71		812-STUDIO-ANSI B	71
							205-1BEDROOM	71						
	TOTAL	426		TOTAL	426		TOTAL	497		TOTAL	426		TOTAL	426
NGX04	320-STUDIO-ANS...	71	NGX10	808-1 BEDROOM-ANSI B	71	NGX16	331-1 BEDROOM-ANSI...	71	NGX22	312-2 BEDROOM-ANSI B, OPTIO...	71	NGX28	333-1 BEDROOM-ANS...	71
	420-STUDIO-ANS...	71		310-1 BEDROOM-ANSI B	71		431-1 BEDROOM-ANSI...	71		412-2 BEDROOM-ANSI B, OPTIO...	71		433-1 BEDROOM-ANS...	71
	501-STUDIO-ANS...	71		410-1 BEDROOM-ANSI B	71		520-1 BEDROOM-ANSI...	71		505-2 BEDROOM-ANSI B	71		521-1 BEDROOM-ANS...	71
	601-STUDIO-ANS...	71		506-1 BEDROOM-ANSI B	71		620-1 BEDROOM-ANSI...	71		605-2 BEDROOM-ANSI B	71		621-1 BEDROOM-ANS...	71
	701-STUDIO-ANS...	71		606-1 BEDROOM-ANSI B	71		720-1 BEDROOM-ANSI...	71		705-1 BEDROOM-ANSI B	71		721-1 BEDROOM-ANS...	71
	820-STUDIO-ANS...	71		706-1 BEDROOM-ANSI B	71		831-1 BEDROOM-ANSI...	71		812-2 BEDROOM-ANSI B, OPTIO...	71		823-1 BEDROOM-ANS...	71
													207-1 BED + DEN	71
	TOTAL	426		TOTAL	426		TOTAL	426		TOTAL	426		TOTAL	497
NGX05	318-STUDIO-ANS...	71	NGX11	321-2 BEDROOM-ANSI B, OPTIO...	71	NGX17	432-2 BEDROOM-ANSI...	71	NGX23	304-LOFT-ANSI A	71	NGX29	307-STUDIO-ANSI A	71
	418-STUDIO-ANS...	71		421-2 BEDROOM-ANSI B, OPTIO...	71		522-2 BEDROOM-ANSI...	71		404-LOFT-ANSI B	71		407-STUDIO-ANSI B	71
	502-STUDIO-ANS...	71		514-2 BEDROOM-ANSI B	71		622-2 BEDROOM-ANSI...	71		509-LOFT-ANSI B	71		528-STUDIO-ANSI B	71
	602-STUDIO-ANS...	71		614-2 BEDROOM-ANSI B	71		722-2 BEDROOM-ANSI...	71		609-LOFT-ANSI B	71		628-STUDIO-ANSI B	71
	702-STUDIO-ANS...	71		714-2 BEDROOM-ANSI B	71		201-1 BEDROOM	71		709-LOFT-ANSI B	71		728-STUDIO-ANSI B	71
	818-STUDIO-ANS...	71		821-CLUB ROOM-	71					804-LOFT-ANSI B	71		807-STUDIO-ANSI B	71
	TOTAL	426		TOTAL	426		TOTAL	355		TOTAL	426		TOTAL	426
NGX06	313-LOFT-ANSI B	71	NGX12	322-1 BEDROOM-ANSI B	71	NGX18	328-LOFT-ANSI B	71	NGX24	306-LOFT-ANSI B	71	NG_RF1	WH-1	499
	413-LOFT-ANSI B	71		422-1 BEDROOM-ANSI B	71		428-LOFT-ANSI B	71		406-LOFT-ANSI B	71		WH-2	499
	531-LOFT-ANSI B	71		512-1 BEDROOM-ANSI B	71		524-LOFT-ANSI B	71		508-1 BEDROOM-ANSI B	71		WH-3	499
	631-LOFT-ANSI B	71		615-1 BEDROOM-ANSI B	71		624-LOFT-ANSI B	71		608-1 BEDROOM-ANSI B	71		WH-4	499
	731-LOFT-ANSI B	71		715-1 BEDROOM-ANSI B	71		724-LOFT-ANSI B	71		708-1 BEDROOM-ANSI B	71		WH-5	499
	813-LOFT-ANSI B	71		821-CLUB ROOM-	71		828-LOFT-ANSI B	71		806-1 BEDROOM-ANSI B	71		WH-6	499
				FIRE PLACE-1	54.946								RTU-2	540
													RTU-3	180
													BBQ-1	80
													BBQ-2	80
													LINEAR FIRE TABLE	110
													TOTAL	3984
												NG_RF2	RTU-1	540
													TOTAL	540
												NG_RT1	RETAIL METER	2000
	TOTAL	426		TOTAL	480.946		TOTAL	426		TOTAL	426		TOTAL	2000

RISER [#]		TOTAL LOAD [KBTUH]	RISER [#]		TOTAL LOAD [KBTUH]	RISER [#]		TOTAL LOAD [KBTUH]	RISER [#]		TOTAL LOAD [KBTUH]	RISER [#]		TOTAL LOAD [KBTUH]
NGX01		426	NGX07		426	NGX13		497	NGX19		426	NGX25		426
NGX02		426	NGX08		426	NGX14		426	NGX20		426	NGX26		426
NGX03		426	NGX09		426	NGX15		497	NGX21		426	NGX27		426
NGX04		426	NGX10		426	NGX16		426	NGX22		426	NGX28		497
NGX05		426	NGX11		426	NGX17		355	NGX23		426	NGX29		426
NGX06		426	NGX12		480.946	NGX18		426	NGX24		426	NG_RF1		3984
												NG_RF2		540
												NG_RT1		2000

TOTAL GAS LOAD = 19074.946 KBTUH

EXHAUST FAN VE SCHEDULE

UNIT TAG	AREA SERVED	CFM	ESP INCHES OF H2O	SONES (dB)	MOTOR HP (WATTS)	MOTOR VOLT / PH	DESIGN BASIS	CONTROLS	WT. LBS	NOTES
EF-1	PARKING GARAGE EXHAUST	6,800	0.75	19.1	2	208/3	COOK TDB-15	VFD, CO & NO2	400	1
EF-2	TRASH ROOMS	720	0.625	8.6	1/4	115/1	COOK 120C17D (VF)	CONTINUOUS, EMERGENCY POWER	100	2 - 4
EF-3A	RESIDENCE UNIT #32 SINGLE DRYER EXHAUST SUB-DUCT SHAFT	370	0.625	6.6	1/6	115/1	COOK 90C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-3B	RESIDENCE UNIT #32 SINGLE KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	250	0.625	6.6	1/6	115/1	COOK 90C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-3C	RESIDENCE UNIT #32 SINGLE BATHROOM EXHAUST SUB-DUCT SHAFT	280	0.625	6.0	1/6	115/1	COOK 90C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-4A	RESIDENCE UNIT #20 SINGLE DRYER EXHAUST SUB-DUCT SHAFT	370	0.625	6.6	1/6	115/1	COOK 90C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-4B	RESIDENCE UNIT #20 SINGLE KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	250	0.625	6.6	1/6	115/1	COOK 90C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-4C	RESIDENCE UNIT #20 SINGLE BATHROOM EXHAUST SUB-DUCT SHAFT	280	0.625	6.0	1/6	115/1	COOK 90C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-5A	RESIDENCE UNIT #13 & #15 BACK-TO-BACK DRYER EXHAUST SUB-DUCT SHAFT	740	0.625	10.7	1/3	115/1	COOK 101C28D (VF)	CONTINUOUS, EMERGENCY POWER	100	2 - 4
EF-5B	RESIDENCE UNIT #13 & #15 BACK-TO-BACK KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	500	0.625	8.6	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-5C	RESIDENCE UNIT #13 & #15 BACK-TO-BACK BATHROOM EXHAUST SUB-DUCT SHAFT	560	0.625	6.0	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-6A	RESIDENCE UNIT #16 & #18 BACK-TO-BACK DRYER EXHAUST SUB-DUCT SHAFT	740	0.625	10.7	1/3	115/1	COOK 101C28D (VF)	CONTINUOUS, EMERGENCY POWER	100	2 - 4
EF-6B	RESIDENCE UNIT #16 & #18 BACK-TO-BACK KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	500	0.625	8.6	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-6C	RESIDENCE UNIT #16 & #18 BACK-TO-BACK BATHROOM EXHAUST SUB-DUCT SHAFT	560	0.625	6.0	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-7A	RESIDENCE UNIT #12 & #14 BACK-TO-BACK DRYER EXHAUST SUB-DUCT SHAFT	740	0.625	10.7	1/3	115/1	COOK 101C28D (VF)	CONTINUOUS, EMERGENCY POWER	100	2 - 4
EF-7B	RESIDENCE UNIT #12 & #14 BACK-TO-BACK KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	500	0.625	8.6	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-7C	RESIDENCE UNIT #12 & #14 BACK-TO-BACK BATHROOM EXHAUST SUB-DUCT SHAFT	560	0.625	6.0	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-8A	RESIDENCE UNIT #11 SINGLE DRYER EXHAUST SUB-DUCT SHAFT	370	0.625	6.6	1/6	115/1	COOK 90C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-8B	RESIDENCE UNIT #11 SINGLE KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	250	0.625	6.6	1/6	115/1	COOK 90C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-8C	RESIDENCE UNIT #11 SINGLE BATHROOM EXHAUST SUB-DUCT SHAFT	280	0.625	6.0	1/6	115/1	COOK 90C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-9A	RESIDENCE UNIT #10 SINGLE DRYER EXHAUST SUB-DUCT SHAFT	370	0.625	6.6	1/6	115/1	COOK 90C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-9B	RESIDENCE UNIT #10 SINGLE KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	250	0.625	6.6	1/6	115/1	COOK 90C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-9C	RESIDENCE UNIT #10 SINGLE BATHROOM EXHAUST SUB-DUCT SHAFT	280	0.625	6.0	1/6	115/1	COOK 90C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-10A	RESIDENCE UNIT #7 & #9 BACK-TO-BACK DRYER EXHAUST SUB-DUCT SHAFT	740	0.625	10.7	1/3	115/1	COOK 101C28D (VF)	CONTINUOUS, EMERGENCY POWER	100	2 - 4
EF-10B	RESIDENCE UNIT #7 & #9 BACK-TO-BACK KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	500	0.625	8.6	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-10C	RESIDENCE UNIT #7 & #9 BACK-TO-BACK BATHROOM EXHAUST SUB-DUCT SHAFT	560	0.625	6.0	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-11A	RESIDENCE UNIT #6 & #8 BACK-TO-BACK DRYER EXHAUST SUB-DUCT SHAFT	740	0.625	10.7	1/3	115/1	COOK 101C28D (VF)	CONTINUOUS, EMERGENCY POWER	100	2 - 4
EF-11B	RESIDENCE UNIT #6 & #8 BACK-TO-BACK KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	500	0.625	8.6	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-11C	RESIDENCE UNIT #6 & #8 BACK-TO-BACK BATHROOM EXHAUST SUB-DUCT SHAFT	560	0.625	6.0	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-12A	RESIDENCE UNIT #3 & #5 BACK-TO-BACK DRYER EXHAUST SUB-DUCT SHAFT	740	0.625	10.7	1/3	115/1	COOK 101C28D (VF)	CONTINUOUS, EMERGENCY POWER	100	2 - 4
EF-12B	RESIDENCE UNIT #3 & #5 BACK-TO-BACK KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	500	0.625	8.6	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-12C	RESIDENCE UNIT #3 & #5 BACK-TO-BACK BATHROOM EXHAUST SUB-DUCT SHAFT	560	0.625	6.0	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-13A	RESIDENCE UNIT #2 & #4 BACK-TO-BACK DRYER EXHAUST SUB-DUCT SHAFT	740	0.625	10.7	1/3	115/1	COOK 101C28D (VF)	CONTINUOUS, EMERGENCY POWER	100	2 - 4
EF-13B	RESIDENCE UNIT #2 & #4 BACK-TO-BACK KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	500	0.625	8.6	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-13C	RESIDENCE UNIT #2 & #4 BACK-TO-BACK BATHROOM EXHAUST SUB-DUCT SHAFT	560	0.625	6.0	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-14A	RESIDENCE UNIT #28 & #30 BACK-TO-BACK DRYER EXHAUST SUB-DUCT SHAFT	740	0.625	10.7	1/3	115/1	COOK 101C28D (VF)	CONTINUOUS, EMERGENCY POWER	100	2 - 4
EF-14B	RESIDENCE UNIT #28 & #30 BACK-TO-BACK KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	500	0.625	8.6	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-14C	RESIDENCE UNIT #28 & #30 BACK-TO-BACK BATHROOM EXHAUST SUB-DUCT SHAFT	560	0.625	6.0	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-15A	RESIDENCE UNIT #31 & #33 BACK-TO-BACK DRYER EXHAUST SUB-DUCT SHAFT	925	0.625	8.3	1/4	115/1	COOK 120C13D	CONTINUOUS, EMERGENCY POWER	100	2 - 4
EF-15B	RESIDENCE UNIT #31 & #33 BACK-TO-BACK KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	585	0.625	8.6	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-15C	RESIDENCE UNIT #31 & #33 BACK-TO-BACK BATHROOM EXHAUST SUB-DUCT SHAFT	660	0.625	6.0	1/3	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-16A	RESIDENCE UNIT #23 & #29 BACK-TO-BACK DRYER EXHAUST SUB-DUCT SHAFT	925	0.625	10.7	1/2	115/1	COOK 101C28D (VF)	CONTINUOUS, EMERGENCY POWER	100	2 - 4
EF-16B	RESIDENCE UNIT #23 & #29 BACK-TO-BACK KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	585	0.625	8.6	1/3	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-16C	RESIDENCE UNIT #23 & #29 BACK-TO-BACK BATHROOM EXHAUST SUB-DUCT SHAFT	660	0.625	6.0	1/3	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-17A	RESIDENCE UNIT #23 & #29 BACK-TO-BACK DRYER EXHAUST SUB-DUCT SHAFT	925	0.625	10.7	1/2	115/1	COOK 101C28D (VF)	CONTINUOUS, EMERGENCY POWER	100	2 - 4
EF-17B	RESIDENCE UNIT #25 & #27 BACK-TO-BACK KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	585	0.625	8.6	1/3	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-17C	RESIDENCE UNIT #25 & #27 BACK-TO-BACK BATHROOM EXHAUST SUB-DUCT SHAFT	660	0.625	6.0	1/3	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-18	BIKE STORAGE 204	210	0.375	2.1	(166)	120/1	BROAN L250	LIGHT SWITCH	30	4, 5
EF-19A	RESIDENCE UNIT #24 & #26 BACK-TO-BACK DRYER EXHAUST SUB-DUCT SHAFT	740	0.625	10.7	1/3	115/1	COOK 101C28D (VF)	CONTINUOUS, EMERGENCY POWER	100	2 - 4
EF-19B	RESIDENCE UNIT #24 & #26 BACK-TO-BACK KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	500	0.625	8.6	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-19C	RESIDENCE UNIT #22 & #24 BACK-TO-BACK BATHROOM EXHAUST SUB-DUCT SHAFT	560	0.625	6.0	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-20A	RESIDENCE UNIT #21 & #22 BACK-TO-BACK DRYER EXHAUST SUB-DUCT SHAFT	740	0.625	10.7	1/3	115/1	COOK 101C28D (VF)	CONTINUOUS, EMERGENCY POWER	100	2 - 4
EF-20B	RESIDENCE UNIT #21 & #22 BACK-TO-BACK KITCHEN RANGE EXHAUST SUB-DUCT SHAFT	500	0.625	8.6	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-20C	RESIDENCE UNIT #21 & #22 BACK-TO-BACK BATHROOM EXHAUST SUB-DUCT SHAFT	560	0.625	6.0	1/4	115/1	COOK 100C17DEC	CONTINUOUS, EMERGENCY POWER	50	2 - 4
EF-21	RESTROOM 107	30/70	0.25	0.4	(10.2)	115/1	PANASONIC FV-05-11VKS1	LIGHT SWITCH	20	4, 5
EF-22	AMENITY 109, 210 CEILING EXHAUST	855	0.375	4.2	(306)	120/1	BROAN L900	LIGHT SWITCH	70	4, 5
EF-23	RESTROOM 213	30/70	0.25	0.4	(10.2)	115/1	PANASONIC FV-05-11VKS1	LIGHT SWITCH	20	4, 5
EF-24	WATER 118	300	0.250	0.4	(146)	115/1	BROAN L400	THERMOSTAT	40	3, 4, 8
EF-25	CLUBROOM RESTROOM	30/70	0.25	0.4	(10.2)	115/1	PANASONIC FV-05-11VKS1	CONTINUOUS	20	4, 5
EF-26	JANITOR 111	40	0.25	0.4	(10.2)	115/1	PANASONIC FV-05-11VKS1	LIGHT SWITCH	20	4, 5
EF-27	PARKING GARAGE EXHAUST CAR STACKER	2,000	0.125	4.5	1/2	115/1	COOK TDB-8	CONTINUOUS	100	20
EF-28	PARKING GARAGE EXHAUST CAR STACKER	2,000	0.125	4.5	1/2	115/1	COOK TDB-8	CONTINUOUS	100	20
CEF-1	RESIDENCE BATHROOM EXHAUST	30/70	0.25	0.4	(10.2)	115/1	PANASONIC FV-05-11VKS1	LIGHT SWITCH	20	4, 5, (QTY. 193)
TF-1	RESIDENCE INTERIOR BEDROOM (REQUIRED PER CODE)	50	0.1	1.2	(6.3)	115/1	DELTA BREEZ SLM50	LIGHT SWITCH	20	(QTY. 48)
TF-2	RESIDENCE EXTERIOR BEDROOM (TBD)	50	0.1	1.2	(6.3)	115/1	DELTA BREEZ SLM50	LIGHT SWITCH	20	(QTY. 73)
TF-3	OFFICE 103 VENTILATION	50	0.1	1.2	(6.3)	115/1	DELTA BREEZ SLM50	LIGHT SWITCH	20	-
SF-1	VENTILATION AIR BOOSTER FAN	1,440	0.5	10.6	1/2	120/1	COOK 165SQN10D	INTERLOCK TO FC 2-1	200	4, 7
SF-2	GENERATOR ROOM TRANSFER SWITCH	3,000	0.5	(86)	(1,450)	230/3	FANTECH FKD18	THERMOSTAT, FIRE, LIFE SAFETY, EMERGENCY POWER	130	3, 4, 19
* SPF-1A	EXIT 113 CODE PRESSURIZATION	1,000	0.5	-	3/4	115/1	COOK 90QMX	FIRE, LIFE SAFETY, EMERGENCY POWER	200	3, 4
* SPF-1	STAIR 1- WEST STAIR CODE PRESSURIZATION	12,500	1.0	(78)	7.5	208/3	COOK 225QMX	FIRE, LIFE SAFETY, EMERGENCY POWER	1,000	9 - 18
* SPF-2	STAIR 1- EAST STAIR CODE PRESSURIZATION	12,500	1.0	(78)	7.5	208/3	COOK 225QMX	FIRE, LIFE SAFETY, EMERGENCY POWER	1,000	9 - 18

NOTES:

1. PROVIDE WITH DISCONNECT, PREMIUM EFFICIENT MOTOR, 1.5 SF DRIVES AT 2586 RPM, ACCESS DOOR-HINGED, BELT TUNNEL, L10 200K BEARINGS, ISOLATION RAILS, VENTED BELT GUARD, (4) SC-245 ISOLATORS.
2. PROVIDE WITH ROOF CURB.
3. CONNECT TO EMERGENCY GENERATOR.
4. PROVIDE WITH FAN SPEED CONTROL.
5. PROVIDE WITH WALL MOUNTED SWITCH
6. PROVIDE WITH VFD
7. PROVIDE WITH EXTERNAL SPEED CONTROL, VFABK AIR BALANCE KIT, NEMA-1 PRE-WIRED DISCONNECT, SC2-70 SET(4) ISOLATORS.
8. LINE VOLTAGE THERMOSTAT PROVIDED BY A.H.I. & INSTALLED & WIRED BY ELECTRICAL CONTRACTOR.
9. FAN START / STOP BY FIRE ALARM PANEL. (CONTROL WIRING BY FIRE ALARM CONTRACTOR) FAN TO START AUTOMATICALLY AND OPERATE CONTINUOUSLY THROUGH ALL ALARM EVENTS.
10. PROVIDE 2-POSITION AUTO CONTROL SMOKEL DAMPER. SMOKE DAMPER TO BE POWERED CLOSED, FAIL OPEN.
11. EMERGENCY POWER REQUIRED FOR FAN AND ACCESSORIES. MOTOR STARTER AND DISCONNECT BY ELECTRICAL CONTRACTOR.
12. PROVIDE DUAL BELT DRIVE WITH MINIMUM 1.5 X THE NUMBER OF BELTS REQUIRED.
13. UNIT TO BE MOUNTED ON EXTERIOR ROOF. PROVIDE MANUFACTURER'S WEATHER COVER(S) FOR FAN, MOTOR AND INTAKE WITH INTAKE SCREEN.
14. UNIT TO BE MOUNTED TO EXTERIOR ROOF STRUCTURE, FURNISH WITH SEISMIC RATED MOUTNING BRACKETS AND/ OR FRAME.
15. "SAIL SWITCH" FOR FAN OPERATION VERIFICATION TO BE FURNISHED AND INSTALLED BY MECH. DEVICE POWER WIRING AND CONTROL INTERLOCK WITH FIRE ALARM PANEL BY ELECTRICAL AND FIRE ALARM CONTRACTORS.
16. DUCT MOUNTED SMOKE DETECTOR AT FAN DISCHARGE TO BE FURNISHED AND INSTALLED BY MECH. DEVICE POWER WIRING AND CONTROL INTERLOCK WITH FIRE ALARM PANEL BY ELETRICAL AND FIRE ALARM CONTRACTORS.
17. PROVIDE WITH EXTENDED LUBE LINES, INLET BELL MOUTH WITH SCREEN, EXTENDED MOTOR LEADS.
18. FAN CONSTRUCTION AND PERFORMANCE TO BE CERTIFIED TO MEET UL-705 REQUIREMENTS FOR SMOKE CONTROL DEVICES.
19. LINE VOLTAGE THERMOSTAT PROVIDED BY A.H.I. & INSTALLED & WIRED BY ELECTRICAL CONTRACTOR.
20. PROVIDE WITH DISCONNECT, 1.5 SF DRIVES AT 763 RPM, ACCESS DOOR-HINGED, BELT TENSION-ROTARY, L10 200K BEARINGS, ISOLATION RAILS, VENTED BELT GUARD, (4) SC-70 ISOLATORS.

* FAN SELECTION BASED OFF RATIONAL ANALYSIS.

VRV INDOOR UNIT VE SCHEDULE

VE UNIT TAG	OLD UNIT TAG	AREA SERVED / LOCATION	MITSUBISHI MODEL NO.	NOM TON	SUPPLY CFM	ESP (IN. W.C.)	OSA CFM	COOLI... E.A.T. (oF)	TOTAL COOLING MBH	SENSIBLE COOLING MBH	HEATING E.A.T. (oF)	TOTAL HEATING MBH	ELECTRICAL VOLT. / PHASE	LOAD MCA	APPROX. WEIGHT (LBS)	DIMENSIONS LxWxH (INCHES)	BS #	HP #	NOTES
FC 1-1	FC 1-2	OFFICE 102	PLFY-P18NFMU-E	1.5	740	-	20	76	13.3	7.9	69	10.2	208/230V/1PH	0.5	78	34 X 34 X 11	BS-1	HP-1	1, 2
FC 1-2	FC 1-3	LOBBY, OPEN LEASING	PEFY-P48NMAU-E3	4	1,410	0.64	155	77	40.1	25.5	64	25.4	208/230V/1PH	3.41	160	48 X 36 X 15	BS-1	HP-1	1, 2
FC 1-3	FC 1-4	LOBBY, OPEN LEASING	PEFY-P54NMAU-E	4.5	1,480	0.64	0	75	40.8	25.7	70	31.3	208/230V/1PH	3.31	90	63 X 29 X 10	BS-1	HP-1	1, 2
FC 1-4	FC 1-5	LOBBY INTERIOR	PEFY-P36NMAU-E3	3	990	0.64	200	79	27.2	18.5	59	20.9	208/230V/1PH	3.32	160	48 X 36 X 15	BS-1	HP-1	1, 2
FC 2-1	FC 2-2	AMENITY 210	PVFY-P36AHU-E1	3	1,090	0.8	270	80	33.9	21.8	57	25.4	208/230V/1PH	4.13	150	22 X 21 X 55	BS-1	HP-1	1, 2
FC 2-2	FC 2-3	CO-WORK	PVFY-P54NAHU-E1	4.5	1,485	0.8	400	80	38.2	23.8	56	28.2	208/230V/1PH	5.63	180	25 X 22 X 60	BS-1	HP-1	1, 2
FC 2-3	FC 2-4	2ND FLR. OFFICES	PVFY-P54NAHU-E1	4.5	1,485	0.8	395	80	38.2	23.8	56	28.2	208/230V/1PH	5.63	180	25 X 22 X 60	BS-1	HP-1	1, 2

NOTES:

1 - PROVIDE WITH SIMPLE MA THERMOSTAT.
2 - PROVIDE WITH CONDENSATE PUMP.

City Of Portland
REVIEWED FOR CODE COMPLIANCE
Date: 02/11/20
Project: 19-106743-REV-01-CO

American Heating, Inc.
5035 SE 24TH AVENUE
PORTLAND, OREGON 97202-4765
TELEPHONE (503) 239-4600 FAX (503) 239-70
08/23/18
B. SHEA
J. LOVELL
418308

REGISTERED PROFESSIONAL ENGINEER
49035PE
OREGON
JOSELITO G. AUSTRIA
EXPIRES: 12/31/19

18S
GREYSTAR
1715 SW Salmon St
Portland, OR 97205

REVISIONS

1	ADDENDUM 1	05/03/2019
2	ADDENDUM 2	05/09/2019
A	PERMIT RESPONSE 1	06/03/2019
B	PERMIT RESPONSE 2	08/09/2019
C	PERMIT RESPONSE 3	09/18/2019
3	AB-01	09/27/2019
4	AB-02	11/01/2019

CHECKED BY: Checker
ISSUE DATE: 27 SEP 2019
PROJECT NO: 1803002

HVAC SCHEDULES

M00.01

CONSTRUCTION SET

10/31/2019 3:02:47 PM