

VENTILATION AIR COMPLIANCE

SYSTEM TAG	ZONE	ROOM NAME / NUM.	SPACE TYPE	A <sub>1</sub>	# / 1000 Sq. Ft. [1]	P <sub>1</sub>	R <sub>p</sub>	R <sub>s</sub>	EXHAUST AIRFLOW RATE (CFM / Sq. Ft.) [1]	EXHAUST AIRFLOW RATE PROVIDED (CFM)	V <sub>bz</sub> = (R <sub>p</sub> *P <sub>1</sub> )+(R <sub>s</sub> *A <sub>1</sub> )	E <sub>z</sub>	V <sub>oz</sub> = V <sub>bz</sub> / E <sub>z</sub>	V <sub>pz</sub>	Z <sub>p</sub>	E <sub>p</sub>	P <sub>1</sub>	D = P <sub>1</sub> / Σ <sub>all zones</sub> P <sub>1</sub>	V <sub>oz</sub> = Σ V <sub>bz</sub> x D	V <sub>oz</sub> = V <sub>oz</sub> / E <sub>p</sub>	SCHEDULED TOTAL SYSTEM OUTDOOR AIR (CFM)	
				AREA (Sq. ft.)		ZONE POPULATION [1]	PEOPLE OSA RATE (CFM / Person) [1]	AREA OSA RATE (CFM / Sq. Ft.) [1]			BREATHING ZONE OSA RATE (CFM)	ZONE DISTRIBUTION EFFECTIVENESS [2]	ZONE OUTDOOR AIRFLOW REQUIRED (CFM) [3]	ZONE PRIMARY AIRFLOW (CFM)	PRIMARY OUTDOOR AIR FRACTION	SYSTEM VENTILATION EFFICIENCY [4]	SYSTEM POPULATION	OCCUPANT DIVERSITY	UNCORRECTED OUTDOOR AIR INTAKE (CFM)	OUTDOOR AIR INTAKE FLOW RATE (CFM) REQUIRED		
RTU-2	1	Auditorium - [10]	69 Places of religious worship	2871	120	345	5	0.06	--	--	1898	0.8	2373	5280	0.45	--	201	0.50	1681	2802	2850	
	--	1	Circulation	64 Corridors	1546	--	--	--	0.06	--	--	93	0.8	116	875	0.13						--
	--	1	Storage - [11]	81 Storage rooms	174	--	--	--	0.12	--	--	21	0.8	26	135	0.19						--
	--	1	Platform - [12]	106 Stages, studios	794	70	56	10	0.06	--	--	608	0.8	760	1570	0.48						0.6
	--	1	Storage - [13]	81 Storage rooms	571	--	--	--	0.12	--	--	69	0.8	86	460	0.19						--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						--
RTU-1	--	Lobby	50 Lobbies / prefunction	2499	30	75	7.5	0.06	--	--	713	0.8	891	4300	0.21	0.9	38	0.51	465	517	520	
	--	--	Hallways	64 Corridors	178	--	--	--	0.06	--	--	11	0.8	14	200	0.07						--
	--	--	Janitor	81 Storage rooms	38	--	--	--	0.12	--	50	5	0.8	6	40	0.15						--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
[E] RTU-NW	--	Storage	81 Storage rooms	127	--	--	--	0.12	--	--	15	0.8	19	200	0.10	--	34	0.50	580	725	750	
	--	--	Kids	22 Classrooms (age 9 plus)	1938	35	68	10	0.12	--	--	913	0.8	1141	3500	0.33						0.8
	--	--	Womens Lav	68 Toilet rooms - public	143	--	--	--	--	--	190	--	--	180	--	--						
	--	--	Mens Lav	68 Toilet rooms - public	110	--	--	--	--	--	150	--	--	140	--	--						
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
[E] RTU-SE	--	Nursery 26	20 Day care (through age 4)	220	25	6	10	0.18	--	--	100	0.8	125	275	0.45	0.7	11	1.00	248	355	360	
	--	--	Office 25	53 Office spaces	120	5	1	5	0.06	--	--	13	0.8	16	150	0.11						--
	--	--	Closet 23	81 Storage rooms	44	--	--	--	0.12	--	--	5	0.8	6	50	0.12						--
	--	--	Office 22	53 Office spaces	88	5	1	5	0.06	--	--	11	0.8	14	105	0.13						--
	--	--	Office 21	53 Office spaces	147	5	1	5	0.06	--	--	14	0.8	18	175	0.10						--
	--	--	Office 20	53 Office spaces	248	5	2	5	0.06	--	--	25	0.8	31	300	0.10						--
	--	--	Hallway 24	64 Corridors	298	--	--	--	0.06	--	--	18	0.8	23	350	0.07						--
	--	--	Hallway 18	64 Corridors	192	--	--	--	0.06	--	--	12	0.8	15	250	0.06						--
	--	--	Warming Kitchen 19	60 Kitchens	281	--	--	--	--	--	--	--	--	425	--	--						
	--	1	Lav	68 Toilet rooms - public	58	--	--	--	--	--	80	--	--	--	--	--						--
	--	1	Lav	68 Toilet rooms - public	58	--	--	--	--	--	80	--	--	--	--	--						--
	--	1	Lav	68 Toilet rooms - public	45	--	--	--	--	--	65	--	--	--	--	--						--
	--	1	Lav	68 Toilet rooms - public	45	--	--	--	--	--	65	--	--	--	--	--						--
	--	1	Changing	77 Dressing rooms	167	--	--	--	--	0.25	60	--	--	--	350	--						--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						--
	OSA = Outside Air																					
[1] BASED ON TABLE 403.3 FROM THE 2014 OMSC																						
[2] BASED ON TABLE 403.3.1.2 FROM THE 2014 OMSC																						
[3] SINGLE ZONE SYSTEM OUTDOOR AIR INTAKE FLOW RATE Vot (V <sub>oz</sub> = V <sub>oz</sub> ). OMSC 403.3.2.1																						
[4] FROM TABLE 403.3.2.3.2 FROM THE 2014 OMSC																						

EXHAUST FANS

TAG	MFR [A]	MODEL NO. [A]	TYPE	SERVICE	CFM	SONES	ESP (IN. W.C.)	RPM	MOTOR			APPROX WEIGHT (LBS)	NOTES	
									W	V	PH			
NOT USED	EF-1	GREENHECK	SP-B110	CEILING	RESTROOMS	90	1.3	0.25	884	80	115	1	11	1, 2, 3
	EF-2	GREENHECK	SP-B110	CEILING	RESTROOMS	85	1.2	0.25	839	80	115	1	11	1, 2, 3
	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOTES:														
A. BASIS OF DESIGN, OR APPROVED EQUAL..														
1. ON" IN RESPONSE TO WALL SWITCH. SWITH PROVIDED BY OTHERS.														
2. WITH BACKDRAFT DAMPER.														
3. DIRECT DRIVE MOTOR WITH FACTORY SOLID STATE SPEED CONTROLLER (FIELD MOUNT). MOTOR WITH THERMAL OVERLOAD, RATED FOR CONTINUOUS USE.														

PACKAGED GAS/ELECTRIC ROOFTOP UNITS (RTU)

TAG	MODEL NO. [A]	DISCHARGE	NOMINAL TONS	SUPPLY FAN			COOLING			HEATING			ELECTRICAL				APPROX WEIGHT (LBS)	NOTES
				CFM	ESP (IN W.C.)	MINIMUM OSA (CFM)	MOTOR BHP	CAPACITY MBH	ARI EER	INPUT MBH	OUTPUT MBH	AFUE %	V	PH	MCA	MOCP		
RTU-1	YSD150G3RLA	HORIZ	12.5	4540	1"	520	1.78	150	11	150	120	80	208	3	61	80	1650	1, 3
RTU-2	GAC240A3ELA	HORIZ	20	8320	1"	2850	5.41	251	10	240	192	80	208	3	117	150	2275	1,2,3
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOTES:																		
A. BASIS OF DESIGN: TRANE, CARRIER, OR APPROVED EQUAL																		
1. DIGITAL PROGRAMMABLE THERMOSTAT WITH REMOTE SENSOR																		
2. DUCT SMOKE DETECTOR IN MAIN RETURN DUCT																		
3. POWER EXHAUST (FIELD MOUNT). SPRING ISLOATION CURB (FIELD MOUNT). TWO-SPEED FAN STANDARD MOTOR. DRY-BULB ECONOMIZER.																		

DUCT SILENCERS (DS)

TAG	MFR [A]	MODEL NO. [A]	TYPE	AIRFLOW CFM	APD IN. W.G.	W x H x L INCHES	DYNAMIC INSERTION LOSS DB OCTAVE BAND AND MID-FREQUENCY [CPS]								APPROX WEIGHT (LBS)	NOTES
							63	125	250	500	1000	2000	4000	8000		
DS-1	POTTORFF	RFN 30E	RECTANGULAR	8320	0.21	30 X 30 X 36	4	6	11	18	15	13	12	11	80	1, 2
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOTES: A. BASIS OF DESIGN, OR APPROVED EQUAL..																
1. OUTER CASING 22 GA. GALV. STEEL. INNER PERFORATED 26 GA. GALV. STEEL. MAX PRESSURE CLASS 8 IN. W.G. 2. FILL MATERIAL: FIBERGLASS. FLAME SPREAD 25, SMOKE DEVELOPED 50.																

(EXISTING) PACKAGED GAS/ELECTRIC ROOFTOP UNITS

TAG	MANUF. & MODEL NO. [A]	[A] NOMINAL TONS	SUPPLY FAN		[A] COOLING CAPACITY MBH	[A] HEATING INPUT MBH		OUTPUT MBH	NOTES
			CFM	MINIMUM OSA (CFM)		INPUT MBH	OUTPUT MBH		
RTU-NW	YCD150D3HABB	12.5	4020	750	150	203	163	1	
RTU-SE	YSC072A3RMA001G	6	2430	360	75	80	64	1	
--	--	--	--	--	--	--	--	--	--
NOTES: A. EXISTING MODEL AND CAPABILITIES SHOWN FOR REFERENCE.  1. ADJUST AND SET FOR SUPPLY AIR AND MINIMUM OUTSIDE AIR VOLUME SHOWN, WITH ASSOCIATED RETURN/RELIEF AIR VOLUMES. 2. MINIMUM NATURAL GAS INLET PRESSURE: 3" W.C.									



**COMFORT FLOW HEATING**  
AND AIR CONDITIONING

1951 Dog Street | Springfield | OR 97177  
OFFICE: (541) 726-0100 | FAX: (541) 726-4799  
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SUMMIT CREEK CHURCH  
275 WEST 5th AVE.  
EUGENE, OREGON

SCHEDULES

DRAWN BY: RGM DRAFTING

DESIGNED BY: JE / CMP

CHECKED BY: CMP

FILE NAME: SCC-M

PROJECT NO:

DRAWING SCALE: AS NOTED

DATE: 09OCT17

PLOT SCALE: 1-1

REV: B

SHEET: 2 OF 7

SHEET NO: MO.1

REV	BY	REVISION	DATE
B	CMP	STRUCT., ARCH., & VE REVISIONS	19JAN18