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DEDICATED OUTDOOR AIR UNIT WITH ENERGY RECOVERY SCHEDULE (PART 1)																																														
GENERAL			PHYSICAL		OUTSIDE AIR		SUPPLY FAN ARRAY										EXHAUST FAN ARRAY										DX COOLING COIL				INDIRECT GAS FURNACE															
TAG	MANUFACTURER	MODEL	WEIGHT (LBS)	L x W x H (IN.)	CFM	%	TOTAL AIRFLOW (CFM)	STATIC PRESS (IN.WG)		PHYSICAL				RPM	BHP EACH FAN	MOTOR HP EACH FAN	TOTAL AIRFLOW (CFM)	STATIC PRESS (IN.WG)		PHYSICAL				RPM	BHP EACH FAN	MOTOR HP EACH FAN	TOTAL MBH	SENS. MBH	FACE VELOC. (FPM)	AIR DATA				FUEL		PERFORMANCE DATA						# OF BURNERS				
								EXTERNAL	TOTAL W/DIRTY FILTERS	FAN QTY.	ROWS	COLUMNS	WHEEL DIA. (IN)					EXTERNAL	TOTAL W/DIRTY FILTERS	FAN QTY.	ROWS	COLUMNS	WHEEL DIA. (IN)							EAT (°F)	LAT (°F)	P.D. (IN.WG)	GAS	INLET PRESS. (IN.WG.)	INPUT (MBH)	OUTPUT (MBH)	EAT (°F)	LAT (°F)	AFUE (%)	TURN-DOWN						
																																									DB		WB	DB	WB	
DOAS-1	VALENT	VXE-212-92-39L-17.5D-J	4,769	190.3"x88.3"x73.1"	5,000	100	5,000	1.75	3,922	1	-	-	-	-	1,665	4.84	7-1/2	5,000	1.75	2,917	1	-	-	-	-	1,544	3.93	5	224.9	147.7	247	79.2	66.8	52.4	52.0	0.225	NG	6.0	300.0	240.0	52.8	97.2	-	12:1	-	
DOAS-2	VALENT	VXE-112-41-39H-15D	3,622	171.6"x66.4"x65.9"	4,000	100	4,000	1.75	4,924	1	-	-	-	-	2,444	5.00	7-1/2	4,000	1.75	3,307	1	-	-	-	-	2,256	4.22	5	204.1	126.9	323	81.3	68.6	52.4	52.2	0.421	NG	6.0	300.0	240.0	43.7	99.3	-	12:1	-	
REMARKS - TYPE			REMARKS - RATINGS					REMARKS - FEATURES										REMARKS - INSTALL																												
1. 100% OUTSIDE AIR UNIT WITH ROTARY TYPE TOTAL ENERGY RECOVERY WHEEL (ENTHALPY).			1. AIR HANDLING PERFORMANCE DATA IN ACCORDANCE WITH ARI 430 2. SEE AIR HANDLER HOT WATER COIL SCHEDULE AND AIR HANDLER DX EVAPORATOR COIL SCHEDULE FOR COIL PERFORMANCE. 3. SEE ENERGY RECOVERY WHEEL SCHEDULE THIS SHEET FOR ENERGY RECOVERY WHEEL PERFORMANCE.					1. MODULATING LOW LEAKAGE BYPASS DAMPERS WITH ACTUATORS. 2. PREMIUM EFFICIENCY MOTOR, DIRECT DRIVE PLENUM SUPPLY AIR BLOWER WITH VARIABLE FREQUENCY DRIVE WITH BYPASS (PROVIDED BY UNIT MANUFACTURERS). 3. PREMIUM EFFICIENCY MOTOR, DIRECT DRIVE PLENUM EXHAUST AIR BLOWER WITH VARIABLE FREQUENCY DRIVE WITH BYPASS (PROVIDED BY UNIT MANUFACTURER). 4. 2" SPRING VIBRATION ISOLATED BASES FOR SUPPLY AIR AND EXHAUST BLOWERS. 5. 2" THICK PLEATED DISPOSABLE MERV 8 PRE-FILTER WITH 4" MERV 13 FINAL FILTERS ON OUTDOOR AIR. 6. 2" THICK PLEATED DISPOSABLE MERV 8 FILTER ON EXHAUST AIR PRIOR TO ENERGY WHEEL. 7. PROVIDE CURB ADAPTOR (SEE INSTALL NOTE AND SPECIFICATIONS).										1. PROVIDE WITH SEISMIC AND WIND LOAD RATED CURB. 2. PROVIDE CURB ADAPTOR TO PROVIDE TRANSITION FROM EXISTING CURB TO FOOTPRINT OF NEW DOAS-1 AND DOAS-2. 3. PROVIDE WITH FACTORY MOUNTED SMOKE DETECTORS AT SUPPLY AND EXHAUST DISCHARGE AND INTAKE.																												

SEE PART 2

SEE PART 2

SEE PART 1

DEDICATED OUTDOOR AIR UNIT WITH ENERGY RECOVERY SCHEDULE (PART 2)																											
TYPE	ENERGY RECOVERY																ELECTRICAL				REMARKS						
	SUPPLY AIR DATA - WINTER				RETURN AIR DATA - WINTER				SUPPLY AIR DATA - SUMMER				RETURN AIR DATA - SUMMER				MAX PD (IN.WC)	% EFFICIENCY		MCA	MOP	VOLTAGE	PHASE	TYPE	RATINGS	FEATURES	INSTALL
	EAT(°F)		LAT(°F)		EAT(°F)		LAT(°F)		EAT(°F)		LAT(°F)		EAT(°F)		LAT(°F)												
	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB											
WHEEL	3.1	1.3	52.8	43.9	72.0	55.8	20.9	20.3	91.5	76.3	79.2	66.8	75.0	62.5	87.0	72.8	1.03	72.4	70.8	110.7	125.0	208	3	ALL	ALL	ALL	ALL
WHEEL	3.1	1.3	43.7	37.7	72.0	55.8	29.5	27.7	91.5	76.3	81.3	68.6	75.0	62.5	85.0	71.1	1.02	59.9	56.6	100.4	110.0	208	3	ALL	ALL	ALL	ALL

AC SYSTEM - INDOOR / OUTDOOR UNIT SCHEDULE																		
SYMBOL	MANUFACTURER	SYSTEM MODEL	INDOOR MODEL	OUTDOOR MODEL	TYPE	LOCATION	NOM. TONS	FAN		CAPACITIES		REFRIGERANT PIPING FROM CONDENSING UNIT TO AIR HANDLER		ELECTRICAL			SOUND (DBA)	REMARKS
								CFM (LOW-HIGH)	COOLING (BTU/H)	HEATING (BTU/H)	LIQUID	GAS	MCA	VOLTS	PHASE			
AC-1/ACU-1	mitsubishi	-	PKA-A12LA	PUZ-A12NKA7	A	ELEVATOR MACHINE ROOM 012	1.0	265-455	12,000	18,000	1/4	1/2	11.0	208	1	48	1-5,7,8	
AC-2/AC-3	mitsubishi	-	PKA-A12LA PKA-A12LA	PUZ-HA2NHA	A	IT 112 DATA 209	1.0 1.0	265-455 265-455	12,000 12,000	14,000 14,000	3/8 3/8	5/8 5/8	17.0	208	1	48 48	1-5,7,8	
TYPE: A. HIGH WALL REMARKS: 1. COOLING CAPACITY AT 80°F EDB, 67°F EWB, & 86°F ODB. HEATING CAPACITY AT 70°F EDB, 47°F ODB & 43°F OWB. 2. FURNISH AND INSTALL MANUFACTURES WIRE REMOTE TEMPERATURE SENSOR. 3. FURNISH AND INSTALL ALL CONTROL WIRING NECESSARY FROM OUTDOOR UNIT, INDOOR UNIT, AND ALL OTHER CONTROLS ASSOCIATED WITH SYSTEM. 4. PROVIDE WITH INTERNAL CONDENSATE PLE PUMP. 5. PROVIDE WITH RETURN AIR THERMISTOR. 6. PROVIDE AC-3 WITH LITTLE GIANT VCC-20ULS CONDENSATE PUMP. PUMP SHALL BE CAPABLE OF 45 GALLONS PER HOUR AT 10 FEET OF HEAD. PROVIDE ELECTRICAL CONNECTIONS FOR OPERATIONAL SYSTEM. 7. INDOOR UNIT SHALL BE POWERED OFF OF CORRESPONDING OUTSIDE CONDENSING UNIT. REFER TO MANUFACTURERS INSTRUCTIONS FOR ELECTRICAL CONNECTIONS TO PROVIDE AN OPERATIONAL SYSTEM. 8. CONFIRM REFRIGERANT LINE SIZING WITH THE FACTORY PRIOR TO INSTALLATION BASED ON THE TOTAL LENGTH OF RUN.																		

CABINET UNIT HEATER & UNIT HEATER SCHEDULE														
SYMBOL	MANUFACTURER MODEL NUMBER	TYPE	DIMENSIONS (LxWxH)	CFM	HOT WATER HEATING PERFORMANCE					ELECTRICAL				REMARKS
					HEATING CAP (MBH)	FLOW RATE (GPM)	WATER PD (FT)	HWS (°F)	HWR (°F)	VOLTS	PHASE	HP	FLA	
CUH-A	RITTLING RFR-420-04	RFR	50"x10"x26.5"	420	23.6	4.9	3.6	180	160	120	1	1/25	0.68	1,2,5,6
CUH-B	RITTLING RF-200-04	FL	50"x10"x26.5"	420	23.6	4.9	3.6	180	160	120	1	1/25	0.68	1,2,4,5
TYPE: FL = FLOOR MOUNTED TOP SUPPLY BOTTOM RETURN RFR = FULLY RECESSED CEILING MOUNT - FACE SUPPLY AND RETURN REMARKS: 1. PROVIDE CONTROL INTERFACE WITH BMS. COORDINATE CONTROLS WITH ATC. 2. ALL VALVES AND PIPING SHALL BE MOUNTED IN CABINET. 3. UNIT HEATER SHALL BE SET TO TURN ON AT 40° 4. PROVIDE DISCONNECT SWITCH, WALL MOUNTED THERMOSTAT. 5. PROVIDE 2-ROW HEATING COIL. 6. PROVIDE INTERNAL THERMOSTAT.														

HYDRONIC RADIANT CEILING PANEL SCHEDULE									
GENERAL		PHYSICAL		PERF.		REMARKS			
MANUFACTURER	MODEL	WIDTH (IN)	TUBES	AWT (°F)	BTUH PER LINEAL FOOT	TYPE	RATINGS	FEATURES	INSTALL
AIRITE	AR-X	24	4	150	291	1	1	1	1
REMARKS-TYPE 1. 1/2" I.D. COPPER TUBING MECHANICALLY ATTACHED TO EXTRUDED ALUMINUM LINEAR PANEL(S). COLOR SELECTED BY ARCHITECT.									
REMARKS-RATINGS 1. WIDTH, NUMBER OF TUBES, AND BTUH PER LINEAL FOOT DATA IN THIS SCHEDULE ARE FOR NOMINAL RATING PURPOSES ONLY. SEE PLANS FOR SIZING INFORMATION, AS INDICATED BY THE SYMBOL AT T BOTTOM OF THIS SCHEDULE.									
REMARKS-FEATURES 1. PROVIDE MOUNTING ACCESSORIES INCLUDING OVERLAPPING FINISH TRIM AT ENDS (AND SIDES IF NECESSARY) THAT ALLOWS FOR EXPANSION AND CONTRACTION OF THE CEILING PANEL WITHOUT ADVERSE AFFECT ON THE ADJACENT ARCHITECTURAL FINISHES OR ON ADJACENT PANELS, AND THAT DOES NOT SHOW ANY GAPS IN THE CEILING WHEN THE PANELS ARE INSTALLED									
REMARKS-INSTALL 1. SEE DETAILS ON DWG M500									
FLOWRATE (gpm)= (TOTAL BTUH) / (500 x ΔT)									

DIFFUSER AND REGISTER SCHEDULE								
SYMBOL	MANUFACTURER/ MODEL NUMBER	DUTY	TYPE	BORDER TYPE	CONSTRUCTION			REMARKS
					OBD	FRAME	BLADES	
A	KRUEGER SPLQ	SUPPLY	PLQ	LAY IN	NONE	STEEL	STEEL	
B	KRUEGER SB5	RETURN	LF	LAY IN	NONE	STEEL	STEEL	
C	KRUEGER 880	SUPPLY	LF	SURFACE MOUNT	NONE	STEEL	STEEL	
D	KRUEGER SB5	RETURN/ EXHAUST	LF	SURFACE MOUNT	NONE	STEEL	STEEL	
E	KRUEGER DFL	SUPPLY	LS	LAY IN	NONE	STEEL	STEEL	
F	KRUEGER DFL	RETURN/ EXHAUST	LS	LAY IN	NONE	STEEL	STEEL	
TYPES: DD - DIRECTIONAL DIFFUSER LB - LINEAR BAR LF - LOUVERED FACE LS - LINEAR SLOT SW - SIDEWALL REGISTER PERF - PERFORATED / EGG-CRATE PLQ - PLAQUE DIFFUSER R - ROUND DIFFUSER INDICATES UNIT TYPE A INDICATES NECK SIZE 12x12 INDICATES UNIT CFM CAPACITY 350								
REMARKS:								
1. MECHANICAL CONTRACTOR SHALL FABRICATE A 4'-0" x 10" x 5" DEEP INSULATED PLENUM.								
2. MECHANICAL CONTRACTOR SHALL FIELD INSTALL REMOTE CABLE OPERATED VOLUME CONTROL DAMPER.								
3. PROVIDE ROUND NECK SUPPLY DIFFUSER WITHOUT ANY ADJUSTABLE BLADES FOR KITCHEN USE.								
4. PROVIDE BLANK/OF STRIPS FOR INACTIVE SECTIONS. PROVIDE CUSTOM CURVING AS NECESSARY. COORDINATE WITH ARCHITECT.								