

AIR HANDLING UNIT SCHEDULE

SPECIFIC NOTES:

1. REFER TO SHEET M-702 FOR AHU CONTROL DIAGRAM, AND SEQUENCE OF OPERATION.
2. REFER TO AHU CONTROL MATRIX FOR ACCESSORIES, CONTROL FEATURES AND ADDITIONAL MODIFICATIONS THAT SHALL BE PROVIDED WITH THE EQUIPMENT.
3. UNIT SHALL BE 2" DOUBLE WALLED CONSTRUCTION WITH MINIMUM R-13 VALUE.
4. DISCONNECT SHALL BE UNIT-MOUNTED.
5. PROVIDE WITH UNIT-MOUNTED VFD ON SERVICE SIDE OF UNIT. COORDINATE VFD LOCATIONS WITH DRAWINGS FOR CLEARANCES REQUIRED.
6. PROVIDE SINGLE POINT POWER CONNECTION.
7. DIVISION 26 TO PROVIDE AND WIRE SMOKE DETECTOR FOR SUPPLY / RETURN DUCT.
8. PROVIDE CONCRETE HOUSEKEEPING PAD PER SPECIFICATIONS
9. PROVIDE WITH SPRING VIBRATION ISOLATION.
10. PROVIDE WITH ACCESS DOORS ON SERVICE SIDE OF UNIT INDICATED ON DRAWINGS.
11. SPECIFIED ESP ACCOUNTS DUCT LOSS EXTERNAL TO UNIT.
12. PROVIDE HEATING COIL WITH AIRFLOW PROVING SWITCH AND THERMAL OVERLOADING PROTECTION.
13. PROVIDE AUXILIARY DRAIN PAN WITH WATER DETECTION. WATER DETECTION TO CLOSE CHILLED WATER CONTROL VALVE WHENEVER WATER IS PRESENT
14. SELECT EQUIPMENT FOR ELEVATION OF 3256 FEET ABOVE SEA LEVEL.
15. APPROVED MANUFACTURERS ARE: TRANE, DAIKIN.
16. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

TAG	MANUFACTURER	MODEL	AREA SERVED	AIRFLOW (CFM)	FILTERS		SUPPLY FAN				COOLING COIL (30% PROPYLENE GLYCOL)										PRE-HEAT COIL				HYDRONIC HEATING COIL						UNIT ELECTRICAL SERVICE						OPERATIONAL WEIGHT (LBS)	SPECIFIC NOTES							
					PRE-FILTER	FILTER	TYPE	DRIVE	ESP (IN-WG)	NUMBER OF FANS	MHP	RPM	VFD (Y/N)	MBH		EAT. (°F)		LAT. (°F)		EWT (°F)	LWT (°F)	WPD (FT. HD.)	CAPACITY (MBH)	EAT (°F)	LAT (°F)	FLOW (GPM)	EWT (°F)	LWT (°F)	MBH	EAT (°F)	LAT (°F)	EWT (°F)	LWT (°F)	FLOW (GPM)	WPD (FT. HD.)	VOLT			PH	FLA	MCA	MCP			
														TOTAL	SENS.	DB	WB	DB	WB																								FPM	GPM	DB
DOAS-1	TRANE	CSAA030	DORM	6,700	MERV-8	MERV-14	PLENUM	DIRECT	1.5	2	10	1,800	Yes	\$95.05	\$35.93	99.8	77.6	50	49.9	500	107.4	40	52	8.62	188.71	18	45.18	6	140	120	194.34	50	78	520	140	120	20.6	0.27	208	3	85.5	96	1205	6,345	ALL

FAN COIL UNIT SCHEDULE

SPECIFIC NOTES:

2. EQUIPMENT COMPONENTS SHALL BE BY THE SAME MANUFACTURER.
3. PROVIDE 1" PANEL THROWAWAY AIR FILTERS.
4. PROVIDE WITH 7-DAY PROGRAMMABLE THERMOSTAT WITH STAGED HEATING AND COOLING CAPABILITY AS REQUIRED FOR OPERATION OF AUXILIARY HEATING, COOLING AND [ECONOMIZER] CONTROLS. [PROVIDE ACRYLIC, VANDAL-PROOF, LOCKING THERMOSTAT COVER].
5. DIVISION 16 CONTRACTOR SHALL PROVIDE SMOKE DETECTORS IN [RETURN AIR][AND][SUPPLY AIR] DUCT(S).
6. PROVIDE FACTORY MOUNTED DISCONNECT INSTALLED ON SERVICE SIDE OF UNIT.
7. SPECIFIED FAN ESP ACCOUNTS FOR DUCT LOSSES EXTERNAL TO UNIT.
8. SELECT EQUIPMENT FOR ELEVATION OF 134 FEET ABOVE SEA LEVEL.
9. PROVIDE AUXILIARY DRAIN PAN WITH FLOOD DETECTOR SWITCH TO SHUT OFF UNIT WHEN WATER IS PRESENT IN DRAIN PAN.] [AUXILIARY DRAIN PROVIDED BY PLUMBING CONTRACTOR.
10. PROVIDE SINGLE POINT POWER CONNECTION.
11. ROUTE CONDENSATE DRAIN PIPING FROM UNIT TO NEAREST FLOOR DRAIN AND TERMINATE WITH CODE-APPROVED AIR GAP
12. PROVIDE CONCRETE HOUSEKEEPING PAD PER SPECIFICATIONS.

TAG	MANUFACTURER	MODEL	AREA SERVED	AIRFLOW (CFM)	SUPPLY FAN		HYDRONIC COOLING COIL										HYDRONIC HEATING COIL										UNIT ELECTRICAL SERVICE					OPERATING WEIGHT (LBS)	QTY	SPECIFIC NOTES
					MIN. HP	ESP (IN-WG)	TOTAL CAP. (MBH)	SENS. CAP. (MBH)	EAT (°F)		LAT (°F)		GPM	ROWS	MAX. WPD (FT)	CAP. (MBH)	EAT (°F)	LAT (°F)	GPM	EWT (°F)	LWT (°F)	FPI	MAX. WPD (FT)	VOLT	PHASE	FLA	MCA	MOCP						
									DB	WB	DB	WB																						
FCU-A-L	TRANE	FCAB020	DORM	70	.25	0.1	6.96	5.15	80	67	56.4	55.8	1.25	4	15	4.08	60	78.8	.5	140	123.6	12	4.81	208	1	1.4	1.4	15	81	34				
FCU-A-R	TRANE	FCAB020	DORM	70	.25	0.1	6.96	5.15	80	67	56.4	55.8	1.25	4	15	4.08	60	78.8	.5	140	123.6	12	4.81	208	1	1.4	1.4	15	81	38				
FCU-B-L	TRANE	FCAB080	ADA DORM	200	.25	0.1	18.82	16.59	80	67	61	60	3.39	4	22	14.94	60	77.2	1.5	140	120	12	10.91	208	1	2.5	2.5	15	147	2				
FCU-C-L	TRANE	FCBB080	ELECTRICAL ROOM	400	.25	0.1	6.96	5.15	80	67	56.4	55.8	1.25	4	15	4.08	60	78.8	.5	140	123.6	12	4.81	208	1	1.4	1.4	15	139	1				
FCU-C-R	TRANE	FCBB080	ELECTRICAL ROOM	400	.25	0.1	6.96	5.15	80	67	56.4	55.8	1.25	4	15	4.08	60	78.8	.5	140	123.6	12	4.81	208	1	1.4	1.4	15	139	1				
FCU-D-R	TRANE	FCBB060	LAUNDRY	1,200	.25	0.1	12.53	9.81	80	67	57.5	57	2.26	4	15	9.06	60	80.9	1	140	120	12	7.19	<varies >	1	2.5	2.5	15	200	4				
FCU-E-R	TRANE	FCBB080	MULTIPURPOSE	800	.25	0.1	18.82	16.59	80	67	61	60	3.39	4	22	14.94	60	77.2	1.5	140	120	12	10.12	208	1	2.5	2.5	15	164	3				

HYDRONIC EXPANSION TANK SCHEDULE

TAG	MANUFACTURER	MODEL	TANK SIZE (GAL.)	MIN. ACCEPTANCE VOLUME (GAL.)	DIMENSIONS (IN)			OPERATIONAL WEIGHT (LBS)	
					DIA.	H	INLET SIZE		
HET-1	AMTROL	ST-60VC	25	11	16"	32"	3/4"	HEATING WATER	113

AIR SEPARATOR SCHEDULE

SPECIFIC NOTES:

1. MODEL IS FOR REFERENCE ONLY; ANY MANUFACTURER MEETING THE RFP REQUIREMENTS IS ACCEPTABLE.
2. FURNISH WITH INTEGRAL STRAINER AND BLOWDOWN PORT.

TAG	MANUFACTURER	MODEL	LOCATION	SERVICE	MAX FLOW	P.D. (IN-WC)	PIPE SIZE (IN)		SPECIFIC NOTES
							INLET	OUTLET	
AS-1	BELL & GOSSETT	SRS-3F				0	4.0	4.0	

AIR COOLED CHILLER SCHEDULE

SPECIFIC NOTES:

1. REFER TO CHILLED WATER CONTROL MATRIX FOR ACCESSORIES, CONTROL FEATURES AND ADDITIONAL MODULES THAT SHALL BE PROVIDED WITH THE T...
2. PROVIDE FACTORY MOUNTED AND WIRE MOTOR STARTER.
3. PROVIDE FACTORY MOTOR STARTER AND DISCONNECT SHIPPED LOOSE AND WIRE BY DIVISION 26...
4. CHILLER SELECTED AND DE RATED FOR 305 FT OF ELEVATION.
5. PROVIDE WITH VFD.
6. COORDINATE SIZE OF CONDUCTOR TERMINATION LUGS WITH CONDUCTOR SIZES SHOWN ON ELECTRICAL...
7. UNIT SHALL BE SINGLE POINT POWER CONNECTION.
8. CHILLER SELECTED FOR 30% OF PROPYLENE GLYCOL SOLUTION
9. PROVIDE FLOW OR DIFFERENTIAL PRESSURE SWITCH FOR FIELD INSTALLATION
10. PROVIDE CONDENSER COIL HAIL GUARDS
11. PROVIDE A FACTORY APPLIED COIL CORROSION COATING WHICH IS CAPABLE OF WITHSTANDING GREATER THAN 6,000 HOURS OF THE ASTM B117 SALT SPRAY...
12. PROVIDE WITH CRANKCASE HEATER FOR LOW AMBIENT CONTROL TO -20°F.
13. APPROVED MANUFACTURERS ARE: TRANE
14. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENT.

TAG	MANUFACTURER	MODEL	AMBIENT DB (°F)	CAPACITY NOM. TONNAGE	EVAPORATOR					CONDENSER	UNIT ELECTRICAL SERVICE				OPERATIONAL WEIGHT (LBS)	SPECIFIC NOTES
					DESIGN FLOW (GPM)	MIN. FLOW (GPM)	EWT (°F)	LWT (°F)	PD (FT HEAD)	NO. OF CIRCUITS	VOLT	PH	MCA	MCCP		
CH-1	TRANE	CGAM	95	70	134	105.6	52	40	16.69	2	208	3	313	4000	5,194	

PUMP SCHEDULE

SPECIFIC NOTES:

1. PUMP MOTOR SHALL BE NON-OVERLOADING THROUGHOUT THE FULL RANGE OF THE PUMP CURVE
2. DISCONNECT PROVIDED AND WIRED BY DIVISION 26 CONTRACTOR.
3. PROVIDE PUMP WITH VFD.
4. PROVIDE PUMP WITH MOTOR STARTER.
5. APPROVED MANUFACTURERS ARE: BELL & GOSSETT, ARMSTRONG
6. REFER TO SPECIFICATION FOR ADDITIONAL INFORMATION.
7. PUMP SELECTED FOR 30% PROPYLENE GLYCOL AT 54F.
8. PUMP SELECTED FOR WATER AT 140F.
9. PUMP SELECTED FOR WATER AT 40F.

STRUCTURAL SUPPORT:

- A. SUPPORT PUMP PER DETAIL.
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TAG	MANUFACTURER	MODEL	LOCATION	TYPE	SYSTEM SERVED	FLOW (GPM)	HEAD (FT)	NPSHr (FT)	EFF. (%)	UNIT ELECTRICAL SERVICE				WEIGHT (LBS)	SPECIFIC NOTES
										MOTOR		PHASE			
										RPM	HP	VOLT			
BP-1	BELL & GOSSETT	3x7C	MECHANICAL 117	IN-LINE CENTRIFUGAL	HEATING WATER	160	60	6.34	64.6	2000	4	208	3	0	1,2,3,4,5,6,7,8
BP-2	BELL & GOSSETT	3x7C	MECHANICAL 117	IN-LINE CENTRIFUGAL	HEATING WATER	160	60	6.34	64.6	2000	4	120	3	0	1,2,3,4,5,6,7,8
CHWP-1	BELL & GOSSETT	3x7C	CH-1	IN-LINE CENTRIFUGAL	CHILLED WATER	120	60	5.36	59.5	2000	3	208	3	0	1,2,3,4,5,6,7,9
CHWP-2	BELL & GOSSETT	3x7C	CH-1	IN-LINE CENTRIFUGAL	CHILLED WATER	120	60	5.36	59.5	2000	3	208	3	0	1,2,3,4,5,6,7,9

BOILER SCHEDULE (GAS FIRED)

SPECIFIC NOTES:

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| 1. PROVIDE CONCRETE HOUSE KEEPING PAD PER SPECIFICATIONS. | 10. FURNISH MODULATING BURNER WITH 15%-100% OUTPUT. |
| 2. PROVIDE WITH FLUE CONNECTION TO EXISTING FLUE.. | 11. HOT WATER SYSTEM WILL BE VARIABLE FLOW. |
| 3. PROVIDE FACTORY MOUNTED DISCONNECT. DISCONNECT WIRED BY DIV. 26 CONTRACTOR. | 12. FURNISH RETURN WATER TEMPERATURE RESET CONTROLS. |
| 4. SELECT EQUIPMENT FOR ELEVATION OF 305 FT. | 13. FURNISH WITH CONDENSATE DRAIN OUTLET CONNECTION. |
| 5. PROVIDE CONDENSATE NEUTRALIZATION KIT AND CONDENSATE TRAP. | 14. FURNISH SINGLE POINT ELECTRICAL CONNECTION. |
| 6. BOILER SHALL BE LOW NOX. TO MEET STATE REQUIREMENTS. | 15. BOILER DESIGN FLOW DOES NOT EQUAL TOTAL SYSTEM FLOW; SIMULATE DIVERSITY FOR TEST & BALANCE. |
| 7. MODEL IS FOR REFERENCE ONLY; ANY MANUFACTURER MEETING THE RFP REQUIREMENTS IS ACCEPTABLE. | 16. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. |
| 8. FURNISH DDC INTERFACE MODULE. | |
| 9. FURNISH ACID NEUTILIZATION DRAIN KIT. | |

TAG	MANUFACTURER	MODEL	HEATING									UNIT ELECTRICAL SERVICE			OPERATIONAL WEIGHT (LBS)	SPECIFIC NOTES
			INPUT (MBH)	TURN DOWN	MIN. EFF. (%)	FUEL TYPE	DESIGN FLOW (GPM)	MINIMUM FLOW (GPM)	EW'T (°F)	LWT (°F)	MAX WPD (FT H2O)	VOLT	PH	FLA		
B-1	PATTERSON KELLEY	N750MFD	750	5:1	85	NATURAL GAS	75	15	120	140	0	120	1	0.4	554	
B-2	PATTERSON KELLEY	N750MFD	750	5:1	85	NATURAL GAS	75	15	120	140	0	120	1	0.4	554	