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CHILLED WATER AIR HANDLING UNIT SCHEDULE

TAG	TOT CFM	MAX O4 CFM	ESP	SERVES	GM	TOT MBH	ENT H2O -F	LVG H2O -F	ENT AIR -F (OB)	ENT AIR -F (WB)	LVG AIR -F (OB)	LVG AIR -F (WB)	ELECTRIC HEATING SECTION	ELEC VOLT/PH	MOTOR HP	REMARKS
AHU-1	2000	900	0.60"	CAGES	24.0	120.0	44	54	87.1	73.9	54.6	25.0	50.0	460/3	2.0	--
AHU-2	6000	1200	2.0"	1ST/2ND FLS	56.0	280.0	44	54	83.6	69.4	54.2	7.5	36.0	460/3	7.5	--

NOTE: UNIT SHALL HAVE THE FOLLOWING FEATURES:
 DOUBLE WALL CONSTRUCTION WITH FIBERGLASS INSULATED PANEL SYSTEM, DOUBLE-SLOPED AG DRAIN PAN, DRAIN-THROUGH CONFIGURATION, HIGH-EFFICIENCY INVERTER-DUTY FAN MOTORS, SINGLE-POINT POWER CONNECTIONS, INTEGRATED (FACTORY-MOUNTED) DDC-CONTROLS, SENSORS, AND DEVICES.
 AHU-1 HEATING SECTION SHALL BE EXTERNALLY-MOUNTED DUCT HEATER. AHU-2 HEATING SECTION IS DUCT MOUNTED HEATER IN O4 DUCTWORK.

MECHANICAL LEGEND

ABBREVIATIONS	SYMBOLS
ABV ABOVE FINISHED FLOOR	
AKR MEDICAL OR COMPRESSED AIR BACKDRAFT DAMPER	
BFP BACKDRAFT PREVENTER	
BLM BOTTOM OF DUCT	
BOB BOTTOM OF PIPE	
CAP CAPACITY	
CD CONDENSER WATER RETURN	
CDR CONDENSER WATER SUPPLY	
CDS CLIBIC FEET PER MINUTE	
CLM CEILING OR COOLING (CONTEXT)	
CO CLEANOUT	
CONT CONTINUOUS OR CONTINUATION (CONTEXT)	
CMR DOMESTIC COLD WATER	
CMW CHILLED WATER RETURN	
CMW CHILLED WATER SUPPLY	
DMR DRY BALL (TEMP) PRESERVE	
DEG DOWN	
DN DOWN	
DNG DRAINAGE	
ELEC ELECTRIC OR ELECTRICAL (CONTEXT)	
ENG ENGINEERING	
ERT EXISTING	
EXIST EXISTING	
FD FLOOR DRAIN (RUBBER), FIRE DAMPER (HVAL)	
FDG FLOOR DRAIN CONNECTION	
FEH FLOOR DRAIN CONNECTION	
FEH FEET PER MINUTE	
FT FEET	
GPM GALLONS PER MINUTE	
GPB HOSE BIBER	
HB HEATING	
HDB HDB DRAIN	
HMB HMB DRAIN	
HML HML DRAIN	
HMR HERZ (FREQUENCY)	
HZ HERTZ (FREQUENCY)	
IN INCHES	
INCL INCLINING (CONTEXT)	
KIL KILOWATT	
LAT LEAVING AIR TEMP	
LNT LEAVING WATER TEMP	
LTH THROUGH BTUH	
MECH MECHANICAL	
MKR MANUFACTURER	
MND MOUNTED	
MNS NOT TO SCALE	
O2 OXYGEN	
PD POUND PER SQUARE INCH (PRESSURE)	
PLG POUND PER SQUARE INCH (PRESSURE)	
RD ROOF DRAIN	
RG REQUIRED	
REGR RETURN GRILL	
REGR RETURN GRILLS PER MINUTE	
REGR RETURN GRILLS PER MINUTE	
SENS SENSIBLE	
SP SQUARE FOOT/FEET (AREA)	
SP SQUARE FOOT/FEET (AREA)	
SP SPECIAL GRILL / REGISTER THROUGH	
THRU THROUGH	
TRP THROUGH	
VAC VACUUM	
VERT VERTICAL	
VERT VERT THROUGH ROOF	
W/O WITHOUT	
WET WET BALL (TEMP)	
WET WET BALL (TEMP)	
WATER WATER GAUGE (PRESSURE)	
WATER WATER PRESURE DROP	
WATER WATER SOURCE HEAT PUMP	

AIR COOLED CHILLER SCHEDULE

TAG	TONS	ENT H2O -F	ENT H2O -F	ENT H2O -F	# PASSES	FOUL FCTR	MAX PD	ELEC VOLT/PH	UNIT MON	REG MON	ERR NP/V	REFRIG 410A	MODEL #	WEIGHTS (LBS) RIGGING / OTHER	REMARKS
CH-1	40	91.4	34.0	44.0	--	0.000/0.0	10.0	460/3	91.8	110.0	10.0	14.3	COM040	3359 / 3377	SEE NOTES

NOTES:
 1. UNIT SHALL BE MOUNTED AT GRADE ON A STRUCTURAL SLAB.
 2. UNIT INCLUDES A-T-L STARTER, AND INTEGRATED VPF (VARIABLE PRIMARY FLOW) DDC CONTROLS.
 3. UNIT SHALL COME FULLY CHARGED AND FACTORY RUN-TESTED PRIOR TO DELIVERY AND INSTALLATION.

PUMP SCHEDULE

TAG	CFM	HEAD FT	SERVES	ELEC VOLT/PH	MOTOR HP	REMARKS
P-1	91.2	40	CHILLED WATER	460/3	2.0	B&G SERIES 1510-1-1/2AC, HIGH EFFICIENCY, INVERTER DUTY, TERC MOTOR
P-2	91.2	40	CHILLED WATER	460/3	2.0	B&G SERIES 1510-1-1/2AC, HIGH EFFICIENCY, INVERTER DUTY, TERC MOTOR
REC-1	5.0	20	DOMESTIC HW REIRC	120/1	1/12	B&G SERIES PL-30B, BRONZE CONSTRUCTION, MAINTENANCE-FREE MOTOR

NOTES:
 1. P-1 / P-2 - PROVIDE WITH HIGH-EFFICIENCY INVERTER DUTY MOTOR, TRIPLE DUTY VALVE, SUCTION DIFFUSER W/ STRAINER

TANK SCHEDULE

TAG	WEIGHT	TYPE	VOLUME	ACCEPT	REMARKS
COMP-1	--	VERTICAL DIAPHRAGM - PRESSURIZED	40	N/A	B&G SERIES B
T-1	--	STORAGE - INSULATED	100 GAL	N/A	THERMAL FLYWHEEL TANK

EXHAUST FAN SCHEDULE

TAG	CFM	ESP	TYPE	HP	DRIVE	ELEC	LOCATION	SERIES	GREENHECK MODEL	REMARKS
EF-1	800	0.20"	INLINE	1/6	DIR	120/1	CAGES		SQ-100-A	--
EF-2	6000	0.25"	SIDEMALL	1/2	DIR	120/1	STAGING		SE2-20-427-A10	--
EF-3	6000	0.25"	SIDEMALL	1/2	DIR	120/1	BOAT STOR		SE2-20-427-A10	--
EF-4	240	0.25"	INLINE	1/20	DIR	120/1	1ST FL HEADS		SQ-80-G	--
EF-5	500	0.25"	INLINE	1/15	DIR	120/1	2ND FLOOR 2ND FL HEADS		SQ-95-G	--

ELECTRIC WATER HEATER SCHEDULE

TAG	TYPE	CFM	RECOVERY GAL	RECOVERY @ 90°F RISE	TOTAL KW	# OF ELEMENTS	ELEC VOLT/PH	LOCATION	REMARKS
WH-1	STORAGE	120	110 GPH	24.0	06	480/3	FIRST FLOOR		
WH-2	LOWBOY	10	20 GPH	3.0	01	208/1	SECOND FLOOR	RHEM EGSPI0	
WH-3	INSTANT	--	INSTANT	3.0	01	208/1	BREAK AREA	ETMAX SP3208	

STANDBY LOSSES FROM UNITS SHALL COMPLY WITH ASHRAE 90.1, CURRENT EDITION.
 WH-1 SHALL HAVE MIN ENERGY FACTOR OF 0.93.

ELECTRIC UNIT HEATER SCHEDULE

TAG	TYPE	CFM	THROW AT 9' AFF	TOTAL KW	ELEC VOLT/PH	AMPS	REMARKS
UH-1	HORIZ	400	12'	3.3	480/3	4.0	USER ADJ STAT SET TO 55°F

UNITS ARE FOR OCCUPANT COMFORT AND SAFETY. FURNISH WITH ACCESSORY SUSPENSION KITS WALL-MOUNTED THERMOSTATS (24V), DISCONNECT SWITCH, STRATIFICATION THERMOSTAT, AND SUMMER FAN SWITCH.

VAV BOX SCHEDULE

TAG	TYPE	MIN CFM	COOLING MAX CFM	HEATING MAX CFM	TOTAL # OF ELEMENTS	ELEC VOLT/PH	REMARKS
VAV 1-1	PRIMARY	200	600	300	3.0	277/1	LOCAL DDC CONTROLS
VAV 1-2	PRIMARY	300	750	450	5.0	277/1	LOCAL DDC CONTROLS
VAV 2-1	PRIMARY	175	400	270	3.0	277/1	LOCAL DDC CONTROLS
VAV 2-2	PRIMARY	400	800	500	5.0	277/1	LOCAL DDC CONTROLS
VAV 2-3	PRIMARY	250	600	350	4.0	277/1	LOCAL DDC CONTROLS
VAV 2-4	PRIMARY	500	1600	720	8.0	480/3	LOCAL DDC CONTROLS
VAV 2-5	PRIMARY	500	1000	650	6.0	277/1	LOCAL DDC CONTROLS
VAV 2-6	PRIMARY	350	1200	500	5.0	277/1	LOCAL DDC CONTROLS

FURNISH WITH XXXV-24V TRANSFORMER, AND DDC THERMOSTAT CONTROLS WITH AUTO CHANGEOVER. PROVIDE LISTED ACCESSORY ELECTRIC HEATERS WITH VAV UNITS. UNIT CONTROLLERS SHALL HAVE DUAL-MAXIMUM SETPOINT FULLY PROGRAMMABLE CONTROLS BY SIEMENS.

MINI-SPLIT HPU SYSTEM SCHEDULE

TAG	MBH COOL	HEAT SEER	VOLT	PH	INDR. UNIT	LOCATION	MODEL (INDOOR / OUTDOOR)
AC-1	24.0	24.0	208	1Ø	--	SERVER	MITSU. PKA-A24FAL W/ PUV-A24VHA-B5

NOTE: CONTRACTOR SHALL CLOSELY COORDINATE REQUIRED VOLTAGE AND PHASE OF EQUIPMENT PRIOR TO PURCHASE.

 NAVFAC ENGINEERING, INC. 1500 PINE BLVD WASHINGTON, MO 63091 (636) 948-4822	 STATE OF LOUISIANA PROFESSIONAL ENGINEER DAMIEN W. SERAUSKAS REG. NO. 28519 EXPIRES 12/31/2010	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL AIR STATION JACKSONVILLE MISSISSIPPI	JOHN C. STENNIS SPACE CENTER SOF RIVERINE AND COMBATANT CRAFT OPERATIONS FACILITY MECHANICAL LEGEND AND SCHEDULES	PROJECT NO. M442 SCALE AS NOTED DRAWING NO. 1-1111 SHEET NO. 1-1111 DATE: 05-05-2009 DRAWN BY: M1.0 CHECKED BY: M1.0
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