

Edl, Michele

From: Otto Gabiola [ottog@tikkerengineering.com]
Sent: Monday, July 23, 2012 11:29 AM
To: Edl, Michele
Subject: Mission Aviation - Heat Exchanger
Attachments: Sched.pdf

Michele,

Attached is the PDF with the Heat Exchanger schedule.

Thanks,

Otto

FLAT PLATE HEAT EXCHANGER SCHEDULE

NO.	TYPE	SYSTEM	MBH	LOAD SIDE				SOURCE SIDE				WEIGHT	MANUFACTURER
				GPM	EWI	LWT	PD (PSI)	GPM	EWI	LWT	PD (PSI)		
1	FLAT PLATE	HYDRONIC	690	196	38"	45'	4.9	196	50'	43'	4.9	500	'B&G' P14-102-TK

PUMP SCHEDULE

NO.	TYPE	GPM	HEAD	HP	CHAR	RPM	SYSTEM	SIZE	WEIGHT	MANUFACTURER
1	CLOSE COUPLED	196	57	5	208/30	1750	HYDRONIC	26C	170#	'B&G' MODEL 1531 [1]
2	CLOSE COUPLED	196	57	5	208/30	1750	HYDRONIC	26C	170#	'B&G' MODEL 1531 [1]

[1] PUMP CONTROLLED BY VFD. MINIMUM MOTOR SPEED TO BE 30% RATED FULL LOAD SPEED.

VFD (VARIABLE FREQUENCY DRIVE) SCHEDULE

NO.	EQUIPMENT CONTROLLED	HP	BYPASS	CHAR	MANUFACTURER
1	PUMP - 1	5	NO	208/30	'ABB' - ACH-550
2	PUMP - 2	5	NO	208/30	'ABB' - ACH-550

NOTE: PROVIDE 5% LINE IMPEDENCE.

PLUMBING FIXTURE SCHEDULE

SYM	DESCRIPTION	COLD	HOT	WASTE	VENT
P-1	WATER CLOSET (FV, ADA COMPLIANT)	1"	---	4"	2"
P-2	WATER CLOSET (FV)	1"	---	4"	2"
P-3	URINAL (ADA COMPLIANT)	1"	---	2"	2"
P-4	URINAL	1/2"	1/2"	1-1/2"	1-1/2"
P-5	OVAL SINK [1]	1/2"	1/2"	1-1/2"	1-1/2"
P-6	OVAL SINK (ADA COMPLIANT) [1]	---	---	2"	2"
P-7	FLOOR DRAIN	1/2"	1/2"	3"	2"
P-8	JANITOR SINK	---	---	---	---
P-9	WATER HEATER (30 GAL., 4.5 KW, 208/30) [2]	---	---	4"	3"
P-10	GREASE INTERCEPTOR	3/4"	---	---	---
P-11	HOSE BIBB	1/2"	---	2"	1-1/2"
P-12	WATER COOLER	1/2"	1/2"	2"	1-1/2"
P-13	KITCHEN SINK (DOUBLE BOWL)	---	1/2"	3/4"	---
P-14	DISHWASHER (UNDERCOUNTER)	1"	1"	---	---
P-15	WATER HEATER (80 GAL., 12 KW, 208/30) [2]	1/2"	---	3/4"	---
P-16	ICE MAKER	---	---	2"	2"
P-17	FLOOR SINK	---	---	---	---

[1] INSTALL HANDLE LIMIT STOP KIT WITHIN SINGLE LEVER MIXING FAUCET TO LIMIT OUTLET HOT WATER SUPPLY TEMPERATURE TO 120°F.

[2] VERIFY VOLTAGE REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO ORDER.

DRAWING LEGEND

SHEET	DRAWING TITLE
P1.00	PLUMBING COVER SHEET
P1.01	WASTE AND VENT PLAN - AREA A
P1.02	WASTE AND VENT PLAN - AREA B
P2.01	PLUMBING PLAN - AREA A
P2.02	PLUMBING PLAN - AREA B
P3.01	HYDRONIC PIPING PLAN - AREA A
P3.02	HYDRONIC PIPING PLAN - AREA B
P4.01	PLUMBING DETAILS AND SCHEMATICS

PLUMBING LEGEND

SYMBOL	DESCRIPTION
— CW —	COLD WATER
— HS —	HYDRONIC WATER SUPPLY PIPING
— HR —	HYDRONIC WATER RETURN PIPING
— HW —	HOT WATER PIPING
— IWW —	INJECTION WELL WATER
— PWW —	PRODUCTION WELL WATER
—	PIPE BREAK
—	PIPE RISE
—	PIPE DROP
—	PIPE END CAP
—	REDUCER
—	PT PLUG
—	TEMPERATURE GAUGE
—	PRESSURE GAUGE
— PS —	PRESSURE SENSOR
— TS —	TEMPERATURE SENSOR
—	STRAINER
—	UNION
—	VENT PIPING
—	WASTE PIPING
—	BUTTERFLY VALVE
—	BALL VALVE
—	CHECK VALVE
—	CIRCUIT SETTER
—	CIRCUIT SENSOR
—	2-WAY CONTROL VALVE
—	3-WAY CONTROL VALVE
—	PRESSURE REDUCING VALVE
—	REDUCED PRESSURE BACKFLOW PREVENTER
—	FLEXIBLE CONNECTOR RUBBER DOUBLE SPHER
—	PRESSURE RELIEF VALVE