GAS-FIRED BOILER SCHEDULE

MARK	MBH INPUT	MBH OUTPUT	SERVES	VENT DIAMETER SIZE	V-P-H	FLA	MAX FUSE AMP	MANUFACTURER & MODEL NO.	REMARKS
GWB 1	1050	987	HEAT PUMP LOOP SYSTEM	8"	120-1-60	8	20	"PATTERSON-KELLY" MODEL 'C-1050'	–
GWB 2	1050	987	HEAT PUMP LOOP SYSTEM	8"	120-1-60	8	20	"PATTERSON-KELLY" MODEL 'C-1050'	–
GWB 3	1050	987	HEAT PUMP LOOP SYSTEM	8"	120-1-60	8	20	"PATTERSON-KELLY" MODEL 'C-1050'	–

PUMP SCHEDULE

MARK	SERVICE	GPM	FT/HD	HP	V-P-H	FLANGE SUCT.	FLANGE DISC.	MANUFACTURER & MODEL NO.	REMARKS
P 1	HEAT PUMP SYSTEM	640	110	25	460-3-60	6"	5"	"BELL & GOSSETT" SERIES '1510-5E'	PROVIDE VFD FOR PUMP MOTOR.
P 2	HEAT PUMP SYSTEM	640	110	25	460-3-60	6"	5"	"BELL & GOSSETT" SERIES '1510-5E'	PROVIDE VFD FOR PUMP MOTOR.
P 3	COOLING TOWER SYSTEM	640	75	20	460-3-60	6"	5"	"BELL & GOSSETT" SERIES '1510-5BC'	PROVIDE VFD FOR PUMP MOTOR.
P 4	COOLING TOWER SYSTEM	640	75	20	460-3-60	6"	5"	"BELL & GOSSETT" SERIES '1510-5BC'	PROVIDE VFD FOR PUMP MOTOR.
P 5	BOILER NO. 1	70	20	1	460-3-60	2"	2"	"BELL & GOSSETT" SERIES '1510-2 1/2 BB'	–
P 6	BOILER NO. 2	70	20	1	460-3-60	2"	2"	"BELL & GOSSETT" SERIES '60-2AA'	–
P 7	BOILER NO. 3	70	20	1	460-3-60	2"	2"	"BELL & GOSSETT" SERIES '60-2AA'	–

INDUCED DRAFT COOLING TOWER SCHEDULE

MARK	G.P.M.	ENT. WATER TEMP. °F	LVG. WATER TEMP. °F	ENT. AIR-W.B'F	PIPE SIZE C.S.	PIPE SIZE C.R.	PIPE SIZE C.W. MAKEUP	PIPE SIZE DRAIN	PIPE SIZE OVERFLOW	MANUFACTURER & MODEL NO.	HEATER KW	FAN NO.	FAN HP EA.	FAN VPH	REMARKS
CT 1	500	97	85	78	6"	6"	2"	3"	3"	"EVAPCO" 'AT 19-58'	6	1	7.5	460-3-60	–

PLATE & FRAME HEAT EXCHANGER SCHEDULE (COOLING)

GENERAL UNIT NO	GENERAL SERVICE	GENERAL LOCATION	COOLING TOWER WATER SIDE GPM	EWT	LWT	MAX P.D. (FT-HD)	HEAT PUMP WATER SIDE GPM	EWT	LWT	MAX P.D. (FT-HD)	HEAT EXCHANGED (MBH)	MANUFACTURER AND MODEL NO.	REMARKS
HX 1	HEAT PUMP SYSTEM	MECHANICAL ROOM	640	85	97	22.9	640	105	92.9	20.3	3819	"TACO" MODEL 'TPX258H-M2'	–

AIR TO AIR ENERGY RECOVERY VENTILATOR UNIT SCHEDULE

MARK	SUPPLY AIR SIDE DATA: SUPPLY SIDE C.F.M.	PRESS. DROP IN W.G. TOTAL	INLET TEMPERATURE SUMMER	INLET TEMPERATURE WINTER	OUTLET TEMPERATURE SUMMER	OUTLET TEMPERATURE WINTER	SUPPLY FAN NO.	SUPPLY FAN HP EA.	SUPPLY FAN VPH	EXHAUST AIR SIDE DATA: EXHAUST SIDE C.F.M.	PRESS. DROP IN W.G. TOTAL	EXHAUST FAN NO.	EXHAUST FAN HP EA.	EXHAUST FAN VPH	INLET TEMPERATURE SUMMER	INLET TEMPERATURE WINTER	OUTLET TEMPERATURE SUMMER	OUTLET TEMPERATURE WINTER	THERMAL PERFORMANCE: THERMAL TRANSFER EFFECTIVENESS	HEAT TRANSFERED MBH	MANUFACTURER AND MODEL NO.	REMARKS
ERV 1	21400	2"	95.0	0	–	–	2	20	480-3-60	21400	2.96	2	10	480-3-60	–	–	–	–	–	–	"AAON" 'RN-070-3-0-BA02-3E4'	–

HORIZONTAL WATER SOURCE HEATPUMP UNIT SCHEDULE

MARK	MANUFACTURER & MODEL NUMBER	AIR SIDE FLA	AIR SIDE CFM	WATER SIDE COOLING E.W.T.	COOLING L.W.T.	COOLING TOTAL COOLING	COOLING SENS COOLING	COOLING EER	HEATING E.W.T.	HEATING TOTAL HEATING	HEATING C.O.P.	GPM	PD FT OF WATER	ELECTRICAL DATA V-P-H	TOTAL FLA	COMP RLA	MCA	MAX FUSE	REMARKS
WSHP 1	"MCQUAY" 'WCDS1007J'	0.38	230	85	95	7299	5099	11.4	85	10919	4.2	1.9	4.1	265-1-60	3.38	3.0	4.1	15	–
WSHP 2	"MCQUAY" 'WCDS1009J'	0.65	300	85	95	8900	6400	11.2	85	13799	4.2	2.2	8.1	265-1-60	4.25	3.3	5.2	15	–
WSHP 3	"MCQUAY" 'WCDS1012J'	0.65	400	85	95	12699	9199	11.2	85	19530	4.2	3.2	17.1	265-1-60	4.85	4.2	5.9	15	–
WSHP 4	"MCQUAY" 'WCDS1015J'	0.8	500	85	95	15800	12300	12.5	85	22500	4.2	4	17.5	265-1-60	6.6	5.8	8.1	15	–
WSHP 5	"MCQUAY" 'WCDS1019J'	0.8	630	85	95	19800	13599	12.2	85	27589	4.2	4.8	20.7	265-1-60	7.9	7.1	9.7	15	–
WSHP 6	"MCQUAY" 'WCDS1024J'	1.6	800	85	95	24800	18000	12.1	85	33719	4.2	6.6	10.1	460-3-60	5.5	3.9	6.5	15	–
WSHP 7	"MCQUAY" 'WCDS1030J'	1.6	1000	85	95	32899	23199	12.4	85	43030	4.2	8	24.8	460-3-60	6.4	4.8	7.6	15	–
WSHP 8	"MCQUAY" 'WCDS1036J'	1.7	1200	85	95	36899	26800	12.6	85	51549	4.2	9.7	13.2	460-3-60	6.8	5.1	8.1	15	–
WSHP 9	"MCQUAY" 'WCDS1042J'	1.7	1400	85	95	42600	30699	12.2	85	59719	4.2	10.6	17.6	460-3-60	7.6	5.9	9.1	15	–
WSHP 10	"MCQUAY" 'WCDS1048J'	2.8	1600	85	95	48000	35899	12.2	85	62799	4.2	12.6	19.5	460-3-60	9.9	7.1	11.6	15	–
WSHP 11	"MCQUAY" 'WCDS1060J'	2.8	2000	85	95	62299	44600	12	85	86340	4.2	16	22.4	460-3-60	12.4	9.6	14.8	20	–

EXPANSION TANK SCHEDULE

MARK	SERVES	VOLUME GALLONS	DIAMETER	HEIGHT	APPROX. WEIGHT	MANUFACTURER AND MODEL NO.
ET 1	HEATING PUMP SYSTEM	132	24"	80"	340 LBS	"ARMSTRONG" SERIES '500-L'

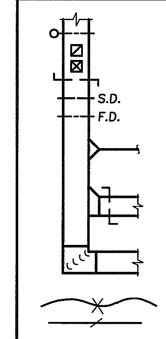
SIDESTREAM SEPARATOR SCHEDULE

MARK	SERVES	VOLUME GALLONS	FLOW GPM	CONNECTION	APPROX. WEIGHT	MANUFACTURER AND MODEL NO.
SS 1	COOLING TOWER SYSTEM	7	90	2"	125 LBS	"PUROFLUX" MODEL 'PF-61-020'

AIR DEVICE SCHEDULE

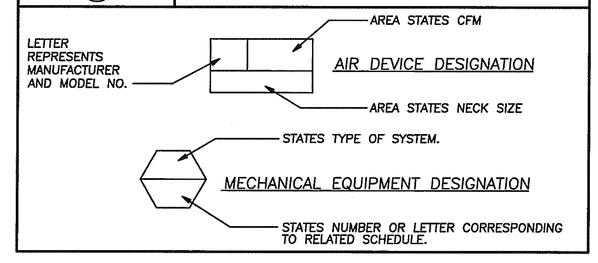
MARK	SYSTEM / TYPE	MANUFACTURER & MODEL NO.	REMARKS
A	SUPPLY / DIFFUSER	"PRICE" SERIES 'SCDA' STEEL CONSTRUCTION, 24"x24" MODULE. PROVIDE OPTIONAL OPPOSED BLADE DAMPER.	–
B	SUPPLY / DIFFUSER	"PRICE" SERIES 'SCDA' STEEL CONSTRUCTION, 12"x12" MODULE. PROVIDE OPTIONAL OPPOSED BLADE DAMPER.	–
C	SUPPLY / DIFFUSER	"PRICE" SERIES 'SCDA' STEEL CONSTRUCTION, 24"x24" MODULE. 2-WAY PATTERN. PROVIDE OPTIONAL OPPOSED BLADE DAMPER.	–
D	SUPPLY / DIFFUSER	"PRICE" SERIES 'TBD7' SLOT DIFFUSER, 24" MODULE LENGTH. PROVIDE OPTIONAL T-BAR CLIP.	–
E	RETURN / DIFFUSER	"PRICE" SERIES 'PDDR' STEEL CONSTRUCTION, 24"x24" MODULE.	–
F	RETURN / DIFFUSER	"PRICE" SERIES 'PDDR' STEEL CONSTRUCTION, 24"x12" MODULE.	–

SYMBOLS & ABBREVIATIONS LIST



A.T.C. DAMPER (MOTOR OPERATED)
RETURN/EXHAUST AIR DEVICE
SUPPLY AIR DEVICE.
MANUAL VOLUME DAMPER – M.V.D.
SMOKE DAMPER, S.D.
FIRE DAMPER, F.D.
CONICAL TEE (SPIN-IN TYPE)
BRANCH DUCT WITH 45° CLINCH COLLAR CONNECTION TO MAIN TRUNK DUCT
TURNING VANES
FLEXIBLE ROUND DUCT
RIGID ROUND DUCT
CONNECT TO EXISTING
REMOVE EXISTING
THERMOSTAT

ACU	AIR-COOLED CONDENSING UNIT
AHU	AIR HANDLING UNIT
BHP	BRAKE HORSEPOWER
BTU	BRITISH THERMAL UNIT
CFM	CUBIC FEET PER MINUTE
CO	CLEANOUT
COMP	COMPRESSOR
COP	COEFFICIENT OF PERFORMANCE
CT	COOLING TOWER
CW	COLD WATER
DISC	DISCHARGE
E.E.R.	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
ERV	ENERGY RECOVERY VENTILATOR UNIT
E.S.P.	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE
F.L.A.	FULL LOAD AMPS
GPM	GALLONS PER MINUTE
H	HERTZ
HD	HEAD
HP	HORSEPOWER
HPR	HEAT PUMP RETURN
HPS	HEAT PUMP SUPPLY
HR	HOUR
HX	HEAT EXCHANGER
IN	INCHES
KW	KILOWATTS
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MBH	1000 BTU'S PER HOUR
M.C.A.	MINIMUM CIRCUIT AMPACITY
MIN.	MINIMUM
P	PUMP, PHASE
P.D.	PRESSURE DROP
R.L.A.	RUNNING LOAD AMPS
RPM	ROTATIONS PER MINUTE
SENS	SENSIBLE
SS	SIDE STREAM SEPARATOR
SUCT	SUCTION
TOT	TOTAL
TWR	TOWER WATER RETURN
TWS	TOWER WATER SUPPLY
V	VOLTS
W.G.	WATER GAUGE
W.P.D.	WATER PRESSURE DROP
WSHP	WATER SOURCE HEAT PUMP
A	PLAN NOTE REFERENCE SYMBOL
R / –	DUAL TEMPERATURE RISER DESIGNATION



Received
JUN 17 2008
Harkins Builders

NOT FOR CONSTRUCTION

KANN PARTNERS
33 SOUTH GAY STREET, SUITE 400 • BALTIMORE, MD 21202
P 410-234-0900
F 410-539-4921
WWW.KANNPARTNERS.COM

SRBR
SIEGEL, RUTHERFORD, BRADSTOCK, & RIDGWAY, INC.
757 FREDERICK ROAD, SUITE 300
CATONSVILLE, MARYLAND 21228

SEAL

These drawings are the property of the Architect, KANN Partners, registered trade name of Kann & Associates, Inc., a Maryland Corporation. Unauthorized reproduction for any purpose is an infringement upon copyright laws. Violators will be subject to prosecution by the fullest extent of the law.
Written dimensions on these drawings shall have precedence over scale dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variation from the dimensions and conditions shown by these drawings.

HEALTH CARE FOR THE HOMELESS, INC.
NEW CLINIC & HEADQUARTERS BUILDING
HILLEN STREET & FALLSWAY
Baltimore, Maryland

Milestone Description	Date
100% DD PACKAGE	04/21/08
50% DD PACKAGE	02/21/08
REVIEW	01/24/08
SCHEMATIC DESIGN	01/11/08

Mark	Revision Description	Date

KANN Project Number:
SM
PM
© KANN Partners registered trade name of Kann & Associates, Inc. 2007

Sheet Title:
MECHANICAL SCHEDULES

M-300