



AIR HANDLING UNIT SCHEDULE

UNIT NUMBER	LOCATION	SERVES	DESIGN BASIS	SUPPLY FAN										COOLING/HEATING/RETURN				FILTERS				REMARKS
				MIN O/A (CFM)	FAN TYPE	WHEEL SIZE-TYPE	FLOW (CFM)	TOTAL SP(IN.)	RPM	BHP	MAX (dBA)	MOTOR HP	VOLTS	PH	COIL NUMBER	COIL NUMBER	COIL NUMBER	INITIAL EFFICIENCY	INITIAL ORIENTATION	FINAL EFFICIENCY	FINAL ORIENTATION	
AHU-1	LOFT	BUILDING	MCQUAY CAH-014	1925	BLOW THRU	16.19-AF	7000	4.0"	2750	8.4	90	10	240	3	CC-1	HC-1	RF-1	30%	FLAT	N/A	N/A	MULTI ZONE UNIT

NOTES:
 1. AIR FLOWS ARE NOMINAL AND INCLUDE A FACTOR FOR LEAKAGE. DETERMINE ACTUAL AIR FLOWS BASED ON BALANCING. SIZE COMPONENTS BASED ON NOMINAL FLOWS.
 2. SUPPLY FAN MUST BE SIZED FOR NO LESS THAN INDICATED TOTAL S.P. USE HIGHER S.P. IF ACTUAL COMPONENTS RESULT IN HIGHER THAN PREDICTED VALUE FOR ANY COMPONENT.
 3. RPM AND BHP MAY VARY BY NO MORE THAN 10% FROM INDICATED VALUE.
 4. REFER TO AHU CONFIGURATION SCHEMATIC (H-4sb) FOR ARRANGEMENT OF COMPONENTS.

HOT WATER BOILER SCHEDULE

UNIT NUMBER	GROSS OUTPUT (B=H MBH)	FUEL	FIRING RATE (GPH)	DRAFT TYPE	ASME PRESSURE RATING	LEAVING WATER TEMP.	REMARKS
B-1	257	#2 FUEL	2.55	FORCED	50	180	NOTE 1, 1/7HP, 120V-1PH, 2.4 AMPS
B-2	257	#2 FUEL	2.55	FORCED	50	180	NOTE 1, 1/7HP, 120V-1PH, 2.4 AMPS
B-3	75	#2 FUEL	0.70	FORCED	50	180	NOTE 2, 1/7HP, 120V-1PH, 2.4 AMPS

NOTE #1 - BASED ON WEIL-McLAIN (B-WG0-9). FURNISH W/ LWCO 30 PSI RELIEF VALVE, HIGH LIMIT, PACKAGE BOILER WITH BURNER (QB-300) AND CONTROLS. FURNISH FLEXIBLE S.S. OIL CONNECTION TO BURNERS, ELECTRICAL JUNCTION BOX WITH WIRING HARNESS. SEE SPECS.
 NOTE #2 - BASED ON WEIL-McLAIN (B-WG0-2). FURNISH W/LWCO 30 PSI RELIEF VALVE, HIGH LIMIT, PACKAGE BOILER WITH BURNER (QB-180) AND CONTROLS. FURNISH FLEXIBLE S.S. OIL CONNECTION TO BURNERS. ELECTRICAL JUNCTION BOX WITH WIRING HARNESS. SEE SPECS.

FAN SCHEDULE

UNIT NUMBER	SERVES	TYPE	DESIGN BASIS	LOCATION	AIR FLOW (CFM)	TOTAL S.P.	FAN RPM	ELECTRIC			NOTES
								HP/W	VOLTS	PHASE	
EF-1	MAIN BATHROOMS	SIC	COOK-135-S0N-B	LOFT MECH.	1725	1.0"	1680	3/4	240	1	FLANGED INLET/OUTLET SPRING TYPE ISOLATORS, INSULATED HOUSING, BELT GUARD
EF-2	VESTIBULE BATHROOMS	DB-INLINE	COOK GEMINI GN-340	CLG	200	0.250"	1625	137 W	120	1	RUBBER IN SHEAR ISOLATORS
EF-3	FUEL OIL ROOM	DB-INLINE	COOK GEMINI GN-320	LOFT	150	0.375"	1360	77 W	120	1	RUBBER IN SHEAR ISOLATORS
EF-4	CRAWL SPACE	DB	COOK GEMINI GC-420	CRAWL SPACE	200	0.375"	1145	170 W	120	1	W/ALUM. GRILLE AND ISOLATOR KIT. PROVIDE LINE VOLTAGE HUMIDISTAT TO E.C. FOR WIRING
EF-5	LOFT & MECH ROOM	PIWF-C	COOK SPD WALL PAC SIZE 14	LOFT	577	0.250"	1050	1/6	120	1	W/ALUM. VOLTAGE MOTORIZED DAMPER W/END SWITCH, WALL BOX & SCREEN PROVIDE 120V THERMOSTAT TO E.C. FOR WIRING (REV. ACTING)
RF-1	AHU-1	FC-DRAW-THRU	INTEGRAL WITH AHU-1	LOFT MECH.	5000	1.0"	1260	3	240	3	FORWARD CURVED DRAW-THRU CENTRIFUGAL FAN

NOTE: INSTALL ALL FANS WITH SPRING VIBRATION ISOLATORS AND FLEX DUCT CONNECTIONS.

UNIT HEATER SCHEDULE

UNIT NUMBER	MANUFACTURER & MODEL	TYPE UNIT	AIR CFM	BTUH	ENT. TEMP. F°		WATER GPM	P.D. (FT)	MOTOR		NOTES
					AIR	WATER			HP	ELECTRICAL	
UH-1	MODINE-HS-18	HORIZ.	340	10,970	60	180	1.5	0.5	16 MHP	120V-1PH	PROVIDE LINE VOLTAGE THERMOSTAT & AQUASTAT TO E.C. FOR WIRING
UH-2	MODINE HS-33	HORIZ.	630	20,100	60	180	2.5	0.2	1/25HP	120V-1PH	PROVIDE LINE VOLTAGE THERMOSTAT & AQUASTAT TO E.C. FOR WIRING

DIFFUSER, REGISTER, AND GRILLE SCHEDULE

PLAN SYMBOL	DESCRIPTION	DESIGN BASIS	FINISH	NECK SIZE	CFM RANGE	ACCESSORIES	REMARKS
SD-1	EXPOSED ROUND DIFFUSER	METAL AIRE SERIES 3000, MODEL A-1	POLISHED ALUM	8"	120	OBD	SEE DIFFUSER CONNECTION DETAIL
SD-2	SURFACE MOUNTED SPOT DIFFUSER	SEIHO INTERNATIONAL PK SERIES	POLISHED ALUM	16"	520	-	SEE MOUNTING DETAIL
SD-3	EXPOSED SPOT DIFFUSER	SEIHO INTERNATIONAL PK SERIES	POLISHED ALUM	12"	240	-	SEE MOUNTING DETAIL
SD-4	SURFACE ROUND DIFFUSER	METAL AIRE SERIES 3000, MODEL A-1	POLISHED ALUM	6"	130	OBD	SEE DIFFUSER CONNECTION DETAIL
SD-5	SURFACE MOUNTED SPOT DIFFUSER	SEIHO INTERNATIONAL PK SERIES	POLISHED ALUM	20"	1140	OBD	SEE DIFFUSER CONNECTION DETAIL
SR-1	SURFACE S/A REGISTER DOUBLE DEFL. TYPE	METAL AIRE MODEL V4004D	POLISHED ALUM	12x6	100-190	OBD (EXTRUDED ALUMINUM)	SEE EXPOSED REGISTER DUCT TAKE-OFF DETAIL
SR-2	SURFACE S/A REGISTER DOUBLE DEFL. TYPE	METAL AIRE MODEL H4004D	POLISHED ALUM	24x6	350	OBD (EXTRUDED ALUMINUM)	SEE ARCH. PLANS FOR BENCH MOUNTING POSITION FRONT BLADES FOR UPWARD THROW
TR-1	EXPOSED SPOT DIFFUSER (USED AS TRANSFER)	SEIHO INTERNATIONAL PK SERIES	POLISHED ALUM	16"	535-570	-	CONNECT TO WALL IN ACCORDANCE W/MANUFACTURER'S INSTRUCTIONS
ER-1	EXPOSED SPOT DIFFUSER (E/A)	SEIHO INTERNATIONAL PK SERIES	POLISHED ALUM	12"	260-265	-	SEE MOUNTING DETAIL
ER-2	EXPOSED SPOT DIFFUSER (E/A)	SEIHO INTERNATIONAL PK SERIES	POLISHED ALUM	10"	200	-	SEE MOUNTING DETAIL
ER-3	EXPOSED SPOT DIFFUSER (E/A)	SEIHO INTERNATIONAL PK SERIES	POLISHED ALUM	8"	100	-	SEE MOUNTING DETAIL
ER-4	EXPOSED SPOT DIFFUSER (E/A)	SEIHO INTERNATIONAL PK SERIES	POLISHED ALUM	10"	130	-	SEE MOUNTING DETAIL
RR-1	EXPOSED SPOT DIFFUSER (R/A)	SEIHO INTERNATIONAL PK SERIES	POLISHED ALUM	20"	1025	-	SEE MOUNTING DETAIL

PUMP SCHEDULE

UNIT NUMBER	SYSTEM	LOCATION	MANUFACTURER & MODEL	GPM	(HEAD) FT	HP	ELECTRICAL	R.P.M.	NOTES
P-1	RADIATION	MECH. ROOM	ARMSTRONG SERIES 4360 SIZE 1-1/2D	25.5	45	1	240V-1PH	1750	
P-2	AHU-1	MECH. ROOM	ARMSTRONG SERIES 4360 SIZE 1-1/2D	28	45	1	240V-1PH	1750	
P-3	BACK-UP	MECH. ROOM	ARMSTRONG SERIES 4360 SIZE 1-1/2D	28	45	1	240V-1PH	1750	
P-4	DOM. HW HTR (B-3)	MECH. ROOM	ARMSTRONG SERIES H-41	13	15	1/4	120V-1PH	1750	
P-5	BOILER B-1	MECH. ROOM	ARMSTRONG SERIES H-32	12	10	1/6	120V-1PH	1750	
P-6	BOILER B-2	MECH. ROOM	ARMSTRONG SERIES H-32	12	10	1/6	120V-1PH	1750	

COOLING/HEATING COIL SCHEDULE

UNIT NUMBER	SERVES	DESIGN BASIS	FLUID	EAT		LAT		AIR FLOW (CFM)	MAX APD (IN)	MIN FACE (FT)	FLUID FLOW (GPM)	EWT F	LWT F	MAX WPD (FT)	COIL		REMARKS
				Db (F)	Wb (F)	Db (F)	Wb (F)								ROWS	FIN IN.	
CC-1	AHU-1	MCQUAY 5EJ104C	R-22	83.0	66.6	56.4	54.7	7000	0.75	14.0	N/A	N/A	N/A	N/A	4	11	COIL SELECTED AT SUCTION TEMPERATURE OF 43F
HC-1	AHU-1	MCQUAY 5WH0803C	WATER	41	N/A	119	N/A	5300	0.75	7.6	28	180F	148F	6.4	3	11	

EQUIPMENT SCHEDULE

PLAN SYMBOL	DESCRIPTION	DESIGN BASIS	CHARACTERISTICS	ELECTRIC	NOTES
CU-1 CU-2	AIR COOLED CONDENSING UNITS	MCQUAY CBA090-HA	NOMINAL 7 1/2 TONS, MINIMUM COOLING CAPACITY 95MB @ 87F OAT AND 43F SATURATED SUCTION TEMPERATURE	240-3PH MCA-34.4	SINGLE OR DUAL COMPRESSORS. PROVIDE ONE COMPRESSOR OF EACH UNIT WITH HOT GAS BYPASS
HUR-1	HEAT PIPE TYPE HEAT RECOVERY UNIT	QDT MODEL TRU-120	NOMINAL SIZE 48"Wx24" HIGH, SIX ROWS, BASED ON ENTERING EXHAUST 70F/20%RH, ENTERING OUTSIDE-20F, FROST THRESHOLD 1F, LEAVING OUTSIDE AIR 20F, OUTSIDE AIR CFM 1925, EXHAUST AIR CFM 1725 CFM OUTSIDE AIR PRESSURE DROP=0.65", EXHAUST AIR PRESSURE DROP=0.58"	115V	PROVIDE WITH INTEGRATED TILT PACKAGE TP-120-3F
LV-1	EXHAUST/RELIEF AIR LOUVER	ARROW MODEL EA-415-D	2 SECTIONS-1-RECTANGULAR: 5'-5 1/4"Wx4'-0"H, 1-TRIANGULAR, TYPE, (STYLE "E"): APPROX DIM: A=5'-5 1/4", B=15", C=24", MINIMUM TOTAL FREE AREA OF 18.0 SF	-	REFER TO ARCHITECTURAL PLANS COORDINATE FINAL DIMENSIONS W/G.C.
LV-2	OUTDOOR AIR LOUVER	ARROW MODEL EA-415-D	RECTANGULAR: 7'-0"Wx5'-4-1/2"H, MINIMUM FREE AREA OF 19.0 SF	-	REFER TO ARCHITECTURAL PLANS COORDINATE FINAL DIMENSIONS W/G.C.
LV-3	BOILER ROOM COMB. AIR (2 LOCATIONS) LOUVER	ARROW MODEL EA-415-D	RECTANGULAR: 1'-4"Wx4'-4"H, MINIMUM FREE AREA OF 2.6 SF	-	REFER TO ARCHITECTURAL PLANS COORDINATE FINAL DIMENSIONS W/G.C.
LV-4	BOILER ROOM COMB. AIR (2 LOCATIONS) LOUVER	ARROW MODEL EA-415-D	RECTANGULAR: 2'-8"Wx1'-4"H, MINIMUM FREE AREA OF 1.3 SF	-	REFER TO ARCHITECTURAL PLANS COORDINATE FINAL DIMENSIONS W/G.C.
LV-5	VESTIBULE BATHROOM EXHAUST LOUVER	ARROW MODEL EA-415-D	SQUARE: 1'-0"x1'-0", MINIMUM FREE AREA OF 0.30 SF	-	REFER TO ARCHITECTURAL PLANS COORDINATE FINAL DIMENSIONS W/G.C.
FT1&2	FUEL OIL TANKS	HIGHLAND TANK - TOUGHTANK	275 GALLON CAPACITY EA., WITH SUPPORT LEGS, VENT, FILL, GAUGE & SUPPLY TAPPINGS 27"Wx44"Hx60"L	-	PROVIDE 2" BUSHING NEAR BOTTOM OF TANK FOR INTER-CONNECT PIPING
T-1	HOT WATER HEATING EXPANSION TANK	ARMSTRONG AX-60	TANK VOLUME = 33.6 GALS; ACC. VOLUME = 11.1 GALS.	-	PROVIDE 2" BUSHING NEAR BOTTOM OF TANK FOR INTER-CONNECT PIPING
T-2	HOT WATER EXPANSION TANK	AMTROL EXTROL MODEL 1500	COMBINATION PACKAGE W/EXTROL TANK, PURGER AND VENT 2 GAL. TANK 0.9 ACC VOLUME	-	PROVIDE 2" BUSHING NEAR BOTTOM OF TANK FOR INTER-CONNECT PIPING
F-1	FILTER SECTION (HRU-1)	FARR 30/30	NOMINAL 24x24, INITIAL RESISTANCE 0.28"	-	PROVIDE WITH TYPE 8 HOLDING FRAME
T-3	DOMESTIC HOT WATER EXPANSION TANK	AMTROL THERM-X-TROL MODEL ST-5	TANK VOLUME: 2.0 GALS; ACC VOLUME = 0.9 GALS.	-	MATERIALS COMPATIBLE FOR POTABLE WATER SYSTEM

FIN-TUBE RADIATION SCHEDULE

PLAN SYMBOL	BTUH/FT	AVERAGE WATER TEMP. F	WTR FLOW GPM	HEIGHT (IN.)	LENGTH (FT.)	COLOR	MANUFACTURER & MODEL	REMARKS
HR-1	844	170	PLAN	11.5	PLAN	ARCH.	RUNTAL RF-4	SUBMIT COLOR CHART
HR-2	507	170	PLAN	11.5	PLAN	ARCH.	RUNTAL R-4	SUBMIT COLOR CHART
HR-3	4238	170	PLAN	84	PLAN	ARCH.	RUNTAL RS2-84	SUBMIT COLOR CHART
HR-4	863	170	PLAN	16	PLAN	ARCH.	RUNTAL RS2-16	SUBMIT COLOR CHART
HR-5	1650	170	PLAN	36	PLAN	ARCH.	RUNTAL RS2-36	SUBMIT COLOR CHART
HR-6	3938	170	PLAN	79	PLAN	ARCH.	RUNTAL RS2-78	SUBMIT COLOR CHART

FLOW CONTROL VALVES

PLAN SYMBOL	SIZE	GPM	PSID RANGE	DESIGN BASIS
V-1	1/2"	0.5	2-32	FDI AUTOFLOW
V-2	1/2"	1.0	2-32	FDI AUTOFLOW
V-3	1/2"	1.25	2-32	FDI AUTOFLOW
V-4	3/4"	1.5	2-3	FDI AUTOFLOW

G:\Drawings\10215000\North_Bound\1-Inb.dwg Monday, January 15, 2001 11:53:20 am jdl

NO. DATE REVISION

DUNCAN • WISNIEWSKI ARCHITECTURE
265 SOUTH CHAMPLAIN STREET, BURLINGTON, VERMONT 05401 (802) 864-0606

Hallam Associates
60 Ferris Street, Suite 302
Burlington, Vermont 05401
(802) 656-4881

WILLISTON INFORMATION CENTER
189 NORTH BOUND
STATE PROJECT # IM-BLDG (4)

SCHEDULES

DRAWN: J.LAMOTHE
CHECKED: M.COOK
PROJ.No: 10215
DATE: JAN 15, 2001

H-1nb