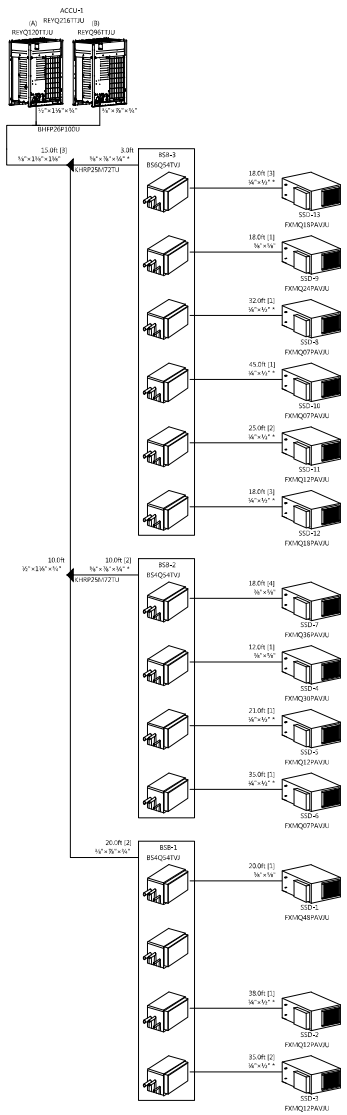

REFRIGERATION PIPING DETAIL

NTS

SPLIT SYSTEM DUCTED (SSD)

OUTDOOR UNIT	MODEL	AMB	KW CLG/HTG	IEER	MAX. FUSE	MIN. CIR. AMP	POWER			
ACCU-1	REYQ216TTJU	95	16.1/22.2	20.2	–	–	–			
ACCU-1 (A)	REYQ120TTJU	–	–	–	50	43	208/3			
ACCU-1 (B)	REYQ96TTJU	–	–	–	45	38	208/3			
INDOOR UNIT	**MODEL**	**CAP (MBH)**	**WET CFM**	**FAN FLA**	**MAX. FUSE**	**MIN. CIR AMP**	**POWER**	**INTERORAL COND PUMP**	**BRANCH SEL BOX**	**OUTDOOR UNIT**
SSD-1	FXMQ48PVJU	48	1377–988	2.7	15A	3.4	208/1	NO	BSB-1	ACCU-1
SSD-2	FXMQ12PVJU	12	335–247	0.5	15A	0.6	208/1	YES	BSB-1	ACCU-1
SSD-3	FXMQ12PVJU	12	335–247	0.5	15A	0.6	208/1	YES	BSB-1	ACCU-1
SSD-4	FXMQ30PVJU	30	882–706	1.8	15A	2.3	208/1	NO	BSB-2	ACCU-1
SSD-5	FXMQ12PVJU	12	335–247	0.5	15A	0.6	208/1	NO	BSB-2	ACCU-1
SSD-6	FXMQ07PVJU	7.5	317–230	0.5	15A	0.6	208/1	NO	BSB-2	ACCU-1
SSD-7	FXMQ36PVJU	36	1130–812	2.3	15A	2.9	208/1	NO	BSB-2	ACCU-1
SSD-8	FXMQ07PVJU	7.5	317–230	0.5	15A	0.6	208/1	NO	BSB-3	ACCU-1
SSD-9	FXMQ24PVJU	24	688–565	1.4	15A	1.8	208/1	NO	BSB-3	ACCU-1
SSD-10	FXMQ07PVJU	7.5	317–230	0.5	15A	0.6	208/1	NO	BSB-3	ACCU-1
SSD-11	FXMQ12PVJU	12	335–247	0.5	15A	0.6	208/1	NO	BSB-3	ACCU-1
SSD-12	FXMQ18PVJU	18	635–529	1.3	15A	1.6	208/1	NO	BSB-3	ACCU-1
SSD-13	FXMQ18PVJU	18	635–529	1.3	15A	1.6	208/1	NO	BSB-3	ACCU-1

UNIT DIMENSIONS			UNIT DIMENSIONS
INDOOR UNIT	DIMENSIONS (HEIGHT, WIDTH, DEPTH)	OUTDOOR UNIT	DIMENSIONS (HEIGHT, WIDTH, DEPTH)
FXMQ007PVJU	11–13/16", 21–21/32", 27–9/16"	REYQ216TTJU	66–11/16, 97–3/4", 30–3/16"
FXMQ09PVJU	11–13/16", 21–21/32", 27–9/16"	REYQ120TTJU	66–11/16", 48–7/8", 30–3/16"
FXMQ12PVJU	11–13/16", 21–21/32", 27–9/16"	REYQ96TTJU	66–11/16", 48–7/8", 30–3/16"
FXMQ18PVJU	11–13/16", 39–3/8", 27–9/16"	–	–
FXMQ24PVJU	11–13/16", 39–3/8", 27–9/16"	–	–
FXMQ30PVJU	11–13/16", 39–3/8", 27–9/16"	–	–
FXMQ48PVJU	11–13/16", 55–1/8", 27–9/16"	–	–

NOTES:

1. BASED ON DAIKIN
2. MECHANICAL CONTRACTOR SHALL COORDINATE WITH MANUFACTURER REGARDING ALL REQUIRED REFRIGERATION PIPING AND ACCESSORIES
3. ACCU TO BE MOUNTED ON THE ROOF ON FIELD FABRICATED RAISED PLATFORM 36" ABOVE ROOF.
4. REFER TO MANUFACTURERS INSTALLATION INSTRUCTIONS FOR COMPLETE INSTALLATION OF THE SYSTEM.
5. OUTDOOR UNIT DIMENSIONS DO NOT INCLUDE MANUFACTURER'S MINIMUM UNIT MODULE SPACING REQUIREMENTS.
6. PROVIDE FIELD INSTALLED FILTER RACKS FOR DUCTED UNITS. FIELD VERIFY BOTTOM OR SIDE FILTER ACCESS.

DUCTLESS SPLIT SYSTEM

OUTDOOR UNIT	MODEL	AMB	KW	SEER	MAX. FUSE	MIN. AMP	POWER
ACCU–2	PUY–A12NHA3	95	1.2	15.2	15	13	208/1
INDOOR UNIT	**MODEL**	**CAP (MBH)**	**WET CFM**	**FAN FLA**	**MAX. FUSE**	**MIN. AMP**	**POWER**
DSS–1	PKA–A12HA	12	380	.33	1	–	208/1

UNIT DIMENSIONS		UNIT DIMENSIONS	
INDOOR UNIT	DIMENSIONS (WIDTH, DEPTH, HEIGHT)	OUTDOOR UNIT	DIMENSIONS (WIDTH, DEPTH, HEIGHT)
DSS–1	36"WX10"DX12"H	ACCU–1	32"WX14"DX24"H

NOTES:

1. BASED ON MITSUBISHI
2. PROVIDE WALL MOUNTED, HARD WIRED, PROGRAMMABLE THERMOSTAT, ALL NECESSARY REFRIGERATION PIPING AND ACCESSORIES
3. ACCU–2 TO BE MOUNTED ON A WALL BRACKET ON THE PENTHOUSE WALL.
4. DSS–1 TO OPERATE WITH ACCU–2
5. REFER TO MANUFACTURERS INSTALLATION INSTRUCTIONS FOR COMPLETE INSTALLATION OF THE SYSTEM
6. UNIT SUITABLE FOR LOW AMBIENT OPERATION WITH OPTIONAL WIND BAFFLE.

DIFFUSER/REGISTER SCHEDULE

UNIT	MODEL NO.	MAX CFM	T.P. " W.C	THROW (FT)	NC	PATTERN	SIZE	NOTES
SAD–1	5000–2	100	.03	7–11	20	4–WAY	6"x6"	1
SAD–2	5000–2	225	.03	8–12	20	4–WAY	9"x9"	1
SAD–3	5000–2	400	.03	9–14	20	4–WAY	12"x12"	1
SAD–4	5000–2	500	.02	8–13	20	4–WAY	15"x15"	1
RAG–1	CC5–1	225	.03	–	20	–	8"x8"	1
RAG–2	CC5–1	400	.02	–	20	–	12"x12"	1
RAG–3	CC5–1	600	.02	–	20	–	18"x12"	1
RAG–4	CC5–6	1200	.02	–	20	–	22"x22"	1,2
EAG–1	CC5–1	225	.03	–	20	–	8"x8"	1
EAG–2	CC5–1	400	.02	–	20	–	12"x12"	1
TAG–1	CC5–1	400	.02	–	20	–	12"x12"	1

NOTES:

1. BASED ON METALAIRE
2. LAY–IN UNIT

FINNED–TUBE RADIATION (FTR)

UNIT	ELEMENT SIZE	ELEMENT LENGTH	ELEMENT ROWS	MBH	AWT	ENCLOSURE MODEL	ENCLOSURE LENGTH	ENCLOSURE HGT	GPM	NOTES
* FTR–8'	1–1/4	8'	1	11.2	180	BUILT–UP			1.1	1,2,3

NOTES:

1. BASED ON STERLING
2. ELEMENT TO BE 1–1/4" CA W/ 4–1/4" SQ ALUM FINS, 50 FPF, PROVIDE 6"W X 8"L EXTRUDED ALUMINUM LINEAR GRILLE FOR TOP OF CABINETRY. PROVIDE TWO 6" X 3"L EXTRUDED ALUMINUM GRILLES FOR FRONT OF CABINETRY. REFER TO BUILT–UP ENCLOSURE DETAIL FOR GRILLE TYPE
3. "*" INDICATES BUILT–UP ENCLOSURE WITHIN CABINETRY

BASEBOARD RADIATION (BB)

UNIT	ELEMENT SIZE	ELEMENT LENGTH	ELEMENT ROWS	MBH	GPM	ENCLOSURE MODEL	ENCLOSURE LENGTH	ENCLOSURE HGT	NOTES
BB–2'	3/4"	2'	1	1.7	0.2	SENIOR	–	10"	1,2,3
BB–3'	3/4"	3'	1	2.5	0.2	SENIOR	–	10"	1,2,3
BB–4'	3/4"	4'	1	3.3	0.3	SENIOR	–	10"	1,2,3
BB–5'	3/4"	5'	1	4.2	0.4	SENIOR	–	10"	1,2,3
BB–6'	3/4"	6'	1	5.0	0.5	SENIOR	–	10"	1,2,3
BB–7'	3/4"	7'	1	5.8	0.6	SENIOR	–	10"	1,2,3
BB–8'	3/4"	8'	1	6.6	0.7	SENIOR	–	10"	1,2,3

NOTES:

1. BASED ON STERLING
2. 3/4" CU TUBE, 2–3/4" x 2–1/2" AL FINS, 60 FPF, AWT = 190
3. MINIMUM OF 0.5 GPM PER INDIVIDUAL SETTING OF RADIATION

HEATERS

UNIT	TYPE	MODEL	CFM	HP	THROW (FT)	MBH	GPM	WPD (FT)	RPM	EWT (°F)	LWT (°F)	NOTES
CUH–1	VER	FTBB020	211	60W	–	14.5	1.0	4.10	–	180	150	1,2
CUH–2	VER	FTBB030	277	85W	–	23.3	1.6	3.20	–	180	150	1,2
CUH–3	HOR	FTDB030	277	85W	–	23.3	1.6	3.20	–	180	150	1,3
UH–1	HOR	S–24	450	16W	–	13.4	1.0	.006	1550	180	150	1,4

NOTES:

1. BASED ON TRANE
2. VERTICAL CABINET, FRONT TOE SPACE INLET AND FRONT STAMPED LOUVER OUTLET, 3 SPEED SWITCH, 2 ROW COIL
3. HORIZONTAL CABINET, BOTTOM STAMPED INLET AND OUTLET, 3 SPEED SWITCH, VIBRATION ISOLATORS, 3 ROW COIL
4. LOUVER FIN DIFFUSER

HEAT RECOVERY UNIT SCHEDULE

UNIT	CFM	TSP	ESP	BHP	HP	POWER	TYPE	DIA.	RPM	
HRU–1	1165	2.8	1.0	0.89	1.3	208/3	AF	12	2468	
DX COIL	AREA	ROWS	FPI	EAT	LAT	SST	SMBH	# CIR	APD	TMBH
HRU–1	4.8	3	16	81/67	57/57	–	31	–	0.18	37.1
HEAT RECOVERY	TYPE	EAT SUMMER	EAT WINTER	LAT SUMMER	LAT WINTER	ROOM DB	ROOM %RH	% EFF		
HRU–1	WHEEL	90/75	-7/-7	81/68	45/35	75	50	66		
FILTER	AREA	TYPE	EFF.	APD				% GLYCOL	WEIGHT	
HRU–1	7.1	PLEAT	MB	0.04				–	–	
EXHAUST FAN	CFM	TSP	ESP	BHP	HP	POWER	TYPE	DIA.	RPM	
HRU–1	1165	–	1.0	0.7	1.3	208/3	AF	12	2315	

NOTES:

1. BASED ON DAIKIN REBEL.
2. SUMMER RECOVERY=35,015 BTU/HR, WINTER RECOVERY=74,405 BTU/HR
3. HOT GAS REHEAT = 16,501 BTU/HR, LP GAS HEATING 80 MBH, TO BE CONVERTED TO NATURAL GAS IN THE FUTURE
4. MCA = 18.8, MOP = 25A.

BOILERS

UNIT	OUTPUT (MBH) GROSS	OUTPUT (MBH) NET	FUEL	MODEL NO.	MBH INPUT	POWER	HP	NOTES
B–1	264	229	LP GAS	WHL285	285	115	–	1,2

NOTES:

1. BASED ON LOCHINVAR WALL MOUNT
2. FLOW SWITCH, LOW WATER CUT–OFF, CONCENTRIC WALL VENT KIT, CONDENSATE NEUTRALIZATION KIT, SMART SYSTEM SOFTWARE AND BMS GATEWAY.
3. LP GAS UNIT, TO BE CONVERTED TO NATURAL IN THE FUTURE

PUMP SCHEDULE (P)

UNIT	LOC.	SYS.	MODEL	TYPE	GPM	TDH (FT)	EFF %	HP	RPM	POWER	NOTES
P–1	BLR	HTG	1915	IL	27	25	48	1/2	1750	208/3	1,2
P–2	BLR	HTG	1915	IL	27	25	48	1/2	1750	208/3	1,2
P–3	BLR	HTG	0014	IL	27	9	–	1/8	3250	115	1

NOTES:

1. BASED ON TACO
2. PUMPS TO BE PROVIDED WITH VFD (BY ELECTRICAL)

Electrical & Mechanical Coordination Matrix

	Plan Wiring	Conduit	Combination Magnetic Starter / Disconnect	Motor Disconnect	Smoke Smoke Detector	Smoke Detector Relay	Smoke Detector Duct Mount	Smoke Detector Fire Alarm Wiring	Wall Mounted Temp Sensor	Wall Mounted Temp Relay	Flow Switch	Flow Switch Relay	Water Temp Sensor	Water Temp Relay	Thermostat	Thermostat Wiring	Transducer	Transducer Wiring & System	Strobe Light	Strobe Light Relay	Duct Detector	Duct Detector Remote Alarm	Duct Detector Remote Reset	Duct Detector Relay	Duct Detector Fire Alarm Wiring	Smoke Damper	Smoke Damper Relay
HRU–1	E																										
	M																										
P–1, P–2	E																										
P–3	E																										
P–1, P–2	M																										
P–3	M																										
CUH–1,2,3	E			M												M	M										
UH–1	E			M												M	M										
BSB, SSD, ISSB – All	E			M												M	M										
ACCU–1 (3 ph) Qty 1	E			M																							
ACCU–2 (1 ph) Qty 1	E			M																							
Sprinkler Wiring to Fire Alarm	E																										
115V Circuit for ATC Control Panel - QTY 4	E																										
Electric Hybrid Water Heater - HTR–1	E																										
Water Cooler - F–FA	E																										
Boiler B–1	E																										
Boiler Emergency Shut–off Switch	E																										
Boiler Fusible Element Switch	E																										

E Signifies Mechanical Supplies and Specifies
M Signifies Electrical Supplies and Specifies

Hewett & Whitney ENGINEERS DESIGNERS
ELECTRICAL & MECHANICAL SYSTEMS
161 MAIN STREET WINTHROP, MAINE
Tel 207-377-6969 Fax 207-377-7584

PLOT DATE: Jul 21, 2015

NO.	DATE	DESCRIPTION

ISSUE FOR CONSTRUCTION
07.22.15

TAC Architectural Group Inc.

STATE OF MAINE — KENNETH W. WHITNEY — 8213 — REGISTERED PROFESSIONAL ENGINEER
07-22-15

BSB - MARGINAL WAY

PORTLAND, MAINE

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