

AIR HANDLING UNIT SCHEDULE			
DESIGNATION	AHU-1	AHU-2	AHU-3
LOCATION	ATTIC MECH. ROOM	ATTIC MECH. ROOM	ATTIC MECH. ROOM
AREA SERVED	DAYROOM	MEETING/TRAINING	OFFICE/RADIO ROOM
MANUFACTURER	DAIKIN	DAIKIN	DAIKIN
MODEL NUMBER	FTQ48TAVJJD	FTQ48TAVJJD	FTQ48TAVJJD
WEIGHT OF UNIT (POUNDS)	150	150	115
UNIT DIMENSIONS LxPxH (IN)	21" x 21" x 53.43"	21" x 21" x 53.43"	21" x 17.5" x 45"
DESIGN DATA:			
SUPPLY AIR (CFM)	1520/1290/1060	1520/1290/1060	600/510/420
OUTDOOR AIR (CFM)	120	470	60
FILTER DATA:			
TYPE/EFFICIENCY	PLEATED/MERV 8	PLEATED/MERV 8	PLEATED/MERV 8
QUANTITY	1	1	1
HOT WATER COIL DATA:			
NO. OF ROWS	2	2	2
EAT (°F) DB	65.0	65.0	65.0
LAT (°F) DB	116.16	116.16	130.50
TOTAL CAP. (MBH)	88.2	88.2	44.3
ENT/LINT (°F)	180/160.22	180/160.22	180/161.25
FLUID FLOW RATE (GPM)	8.7	8.7	4.7
FLUID PD (FT)	7.5	7.5	6.07
EVAPORATOR COIL DATA:			
EAT (°F) DB/WB	80.0/67.0	80.0/67.0	80.0/67.0
TOTAL CAPACITY (MBH)	48.0	48.0	18.0
SUPPLY FAN DATA:			
AIRFLOW VOLUME (CFM)	1520/1290/1060	1520/1290/1060	600/510/420
HP	3/4	3/4	1/2
ESP (IN H ₂ O)	0.9	0.9	0.9
DISCHARGE LOCATION	TOP	TOP	TOP
VOLTS/Ø/Hz	208/1/60	208/1/60	208/1/60
FLA (AMPS)	6.5	6.5	4.9
MOTOR EFFICIENCY	ECM	ECM	ECM
NOTES:			
1. UNITS BASED ON DAIKIN. 2. HVAC CONTRACTOR TO COORDINATE COIL CONNECTION AND ACCESS DOOR SIDE IN FIELD PRIOR TO ORDERING. 3. PROVIDE (1) COMPLETE EXTRA SET OF FILTERS FOR EACH UNIT. 4. REFER TO PLANS AND SECTIONS FOR AIR HANDLING UNIT SECTION ARRANGEMENTS AND DUCTWORK CONNECTION LOCATIONS. 5. ALL MOTORS 1 HP AND LARGER SHALL BE PREMIUM EFFICIENCY. FANS PROVIDED WITH VARIABLE FREQUENCY DRIVES WITH DISCONNECT SWITCHES, SHALL HAVE INVERTER RATED PREMIUM EFFICIENCY MOTORS SUITABLE FOR VARIABLE SPEED AND TORQUE APPLICATIONS. TURN DOWN RATIO OF 10:1. 6. PROVIDE NEMA 1 DISCONNECT SWITCH FOR AIR HANDLERS 7. CASED HEATING COIL. DIVERSIFIED HEAT TRANSFER, INC. MODEL: AHCC-2-210, AHCC-2-175 8. CO2 SENSOR FOR VENTILATION CONTROL ON AIR HANDLERS (AHU-1, 2, 3)			

BOILER SCHEDULE		
DESIGNATION	B-1	B-2
LOCATION	BOILER ROOM	BOILER ROOM
SERVICE	HOT WATER	HOT WATER
MANUFACTURER	VISEMANN	VISEMANN
MODEL NUMBER	C12 - T50	C12 - T50
OPERATING WEIGHT (LBS)	963	963
WATER CONTENT	50.0 GAL	50.0 GAL
GROSS OUTPUT (MBH)	734	734
FUEL SOURCE	NATURAL GAS	NATURAL GAS
INPUT (MBH)	750	750
BOILER HP	21.9	21.9
MIN./MAX. INLET GAS PRESSURE (IN W.C.)	4.0/14	4.0/14
LWT/ENT (°F)	180/160	180/160
FLOW RATE (GPM)	58	58
WATER P.D. (FT.)	-	-
COMBUSTION EFFICIENCY	96.9%	96.9%
BOILER DESIGN PRESSURE (PSI)	80	80
ELECTRICAL REQUIREMENTS		
VOLTAGE/ ϕ / Hz.	120 / 1 / 60	120 / 1 / 60
NOTES: 1. ASME CODE, SECTION IV, MAX PRESSURE= 80 PSIG, MAX TEMP 220°F. 2. ASME CSD-1 BOILER CONTROLS. 3. STAINLESS STEEL HEAT EXCHANGER. 4. INTAKE AIR ADAPTER KIT 5. FULL MODULATION, 5:1 ACROSS THE FIRING RANGE. 6. VARIABLE SPEED COMBUSTION AIR BLOWER. 7. COMBUSTION EFFICIENCY TO BE CSA CERTIFIED BASED ON OPERATING CONDITIONS FOR TESTING UNDER ANSI Z21.13/CSA4.4. 8. BOILERS FURNISHED FOR NATURAL GAS. ALL GAS TRAINS AND CONTROLS FURNISHED WITH BOILERS ARE TO BE VENTLESS. 9. ASME LABELED 10. EACH BOILER SHALL BE EQUIPPED WITH A INDEPENDENT LOW WATER CUTOFF AND MANUAL RESET HIGHTMIT. 11. 10 YEAR WARRANTY ON PRESSURE VESSEL AND 2 YEARS ON BOILER ENCLOSURE, BURNER, CONTROLS AND ACCESSORIES. 12. PROVIDE CONDENSATE TRAP AND ACID NEUTRALIZATION SYSTEM. 13. BOILERS SHALL BE FURNISHED WITH ADAPTORS FOR CPVC VENTING. 14. EM-M1 MIXING VALVE EXTENSION MODULE 120V/1 15. COMBUSTION AIR FILTER KIT FOR VITOGROSSAL 200		

DUCTLESS SPLIT SYSTEM EQUIPMENT SCHEDULE			
SYMBOL	MANUFACTURER	CATALOG #	DESCRIPTION
FCU-1	DAIKIN	FTX18UYJ	INDOOR UNIT-DUCTLESS SPLIT HEAT PUMP, WALL MOUNTED, DISCONNECT SWITCH, FIELD LOCATED WIRE REMOTE CONTROLLER ONE+ WITH EMAIL ALERT CAPABILITY, CONDENSATE PUMP (9/30-230), COOLING 9,000 BTUH MIN, 21,600 MAX., HEATING 9,000 BTUH MIN, RATED 28,000 BTUH @ 47°F - 208/230V, 1Ø
HP-1	DAIKIN	RXL18UMVJJA	OUTDOOR UNIT-AIR COOLED INVERTER HEAT PUMP UNIT, R-410A, COOLING 9,000 BTUH MIN, 21,600 BTUH MAX., HEATING 9,000 BTUH MIN, RATED 28,000 BTUH @ 47°F, RATED 21,600 BTUH @ 5°F, INVERTER DRIVEN COMPRESSOR, BASE FAN HEATER, EXPANSION VALVE, LOW AMBIENT WIND Baffle/AIR ADJUSTMENT GRILLE, NEMA 3R DISCONNECT SWITCH. - SEER 20.3, HSPF 10.3 - MCA 18.1 AMPS, MOP 20.0 AMPS - 208/230V, 1Ø

AIR-COOLED CONDENSING UNIT SCHEDULE			
DESIGNATION	CC-1	CC-2	CC-3
AREA SERVED	DAYROOM	MEETING/TRAINING RM	OFFICE/RADIO RM
UNIT SERVED	AHJ-1	AHJ-2	AHJ-3
MODEL NUMBER	RZQ48TAVJJA	RZQ48TAVJJA	RZQ18TAVJJA
SEER/EER - MAX.	14.8/9.5	14.8/9.5	15.5/2.5
WEIGHT OF UNIT (POUNDS)	225	225	175
CONDENSER DATA:			
AMBIENT TEMPERATURE (°F)	95	95	95
NO. OF ROWS/FPI	2/19	2/19	2/19
NO. OF FANS	2	2	1
FAN MOTOR (EACH)	70 WATTS	70 WATTS	200 WATTS
AIR FLOW	3741 CFM	3741 CFM	2682 CFM
COMPRESSOR DATA:			
REFRIGERANT TYPE	R-410A	R-410A	R-410A
COMPRESSOR TYPE	SCROLL	SCROLL	SCROLL
REFRIGERATION EFFECT (MBH)	48.0	48.0	18.0
CAPACITY CONTROL	14-100 STEPS	14-100 STEPS	14-100 STEPS
SINGLE POINT POWER CONNECTION ELECTRICAL DATA:			
VOLTS/Ø/Hz	208Ø/1/60	208Ø/1/60	208Ø/1/60
MCAMOCBP (AMPS)	29.1/35	29.1/35	16.5/20
NOTES:			
1. UNITS BASED ON DAIKIN SHALL BE COMPLETE WITH THE FOLLOWING: • NON-FUSED DISCONNECT SWITCH NEMA 3R • FACTORY POWERED, 115 VOLT, 60Hz, ELECTRICAL OUTLET • SUCTION AND DISCHARGE ISOLATION VALVES FOR EACH REFRIGERATION SECTION. • 24 VOLT TERMINAL STRIP FOR FIELD SUPPLIED AND INSTALLED CONTROLS. • 115 VOLT TRANSFORMER • GRANKAGE HEATER • LOW AMBIENT COOLING CONTROLS, WINTER START KIT, HARD SHUTOFF TXV, COMPRESSOR START ASSIST - CAPACITOR AND RELAY • COVERED COIL GUARD, FILTER DRYER • LIQUID LINE SOLENOID VALVES • REFRIG CIRCUIT/COMPRESSOR STAGING - VARIABLE SPEED			

LOUVER SCHEDULE			
DESIGNATION	L-1, 3, 4, 6	L-2, 5	
MODEL NUMBER	ESD-435	ESD-435	
LOCATION	ATTIC	I22	
DIMENSIONS LxHxD (IN.)	24"x24"x4"	30"x18"x4"	
SHAPE	RECTANGLE	RECTANGLE	
MIN. FREE AREA (SQ. FT.)	1.01	1.58	
FREE AREA (%)	45.0	42.1	
BLADE ANGLE	35	35	
MATERIAL	ALUMINUM	ALUMINUM	

NOTES:

1. LOUVERS BASED ON GREENHECK.
2. COORDINATE EXACT LOUVER SIZE WITH ARCHITECTURAL PLANS AND WITH WALL OPENINGS IN THE FIELD.
3. ALL LOUVERS SHALL HAVE FACTORY POWDER COAT FINISH, COLOR TO BE SELECTED BY ARCHITECT. SUBMIT COLOR CHART FOR REVIEW.
4. ALL LOUVERS SHALL BE PROVIDED WITH BIRD SCREENS AND EXTENDED SILLS AND FRAMES.
5. LOUVERS SHALL BE PROVIDED BY THE HVAC CONTRACTOR AND INSTALLED BY THE GENERAL CONTRACTOR.
6. LOUVERS SHALL BARE THE AHCA SEAL.

VENTILATION SCHEDULE																			
Space Name	Gross Area	Net Area	Ra	Ventilation based on Net Floor Area		Occupant Density	Calculated Occupants (Pz)	People Used	Rp	Ventilation based on People		Total OA Ventilation (Vbz)	Zone Air Distribution Effectiveness (Ez)	Zone OA Required (Voz)	OA Ventilation Provided	Airflow Rates	Exhaust Required	Exhaust Provided	
	sqft	sqft	CFM/sqft	CFM		#/1000sqft			Cfm/Person	CFM		CFM		CFM	CFM	CFM	CFM/sqft	CFM	CFM
Lobby 100	152	35	0.06	3	+	30	1.1	1	5	5	=	8	x	0.8	10	10	-	-	-
Radio Room 101	126	54	0.06	4	+	5	0.3	1	5	5	=	9	x	0.8	12	15	-	-	-
Office 102	213	78	0.06	5	+	5	0.4	1	5	5	=	10	x	0.8	13	15	-	-	-
Day Room 103	638	388	0.06	24	+	30	11.6	12	5	60	=	84	x	0.8	105	110	-	-	-
Kitchen 104	220	114	0	1	+	0	0.0	1	0	0	=	1	x	0.8	2	60	0.7	80	300
Hallway 105 A	146	46	0.06	3	+	0	0.0	1	0	0	=	3	x	0.8	4	5	-	-	-
Hallway 105 B	136	21	0.06	2	+	0	0.0	1	0	0	=	2	x	0.8	3	5	-	-	-
Meeting/Training 106	656	460	0.06	28	+	100	46.0	46	7.5	345	=	373	x	0.8	467	470	-	-	-
Clean Room 107	184	68	-	-	+	-	-	-	-	-	=	-	x	0.8	-	-	70 PER FIX	70	100
Laundry Room 108	234	120	-	-	+	-	-	-	-	-	=	-	x	0.8	-	-	70 PER FIX	70	100
Toilet 110	61	14	-	-	+	-	-	-	-	-	=	-	x	0.8	-	-	70 PER FIX	140	150
Utility 111	75	19	-	-	+	-	-	-	-	-	=	-	x	0.8	-	-	-	50	50
Gear Room 112	344	203	0	1	+	0	0.0	1	0	0	=	1	x	0.8	2	110	0.5	102	140
Apparatus Room 113	6280	5384	0	1	+	0	0.0	1	0	0	=	1	x	0.8	269	315	0.05	269	315
Sprinkler Room 115	224	119	0	1	+	0	0.0	1	0	0	=	1	x	0.8	2	110	0.12	14	100
Storage 116	147	60	0	1	+	0	0.0	1	0	0	=	1	x	0.8	2	110	0.12	7	50
Electric Room 117	200	100	0	1	+	0	0.0	1	0	0	=	1	x	0.8	2	110	0.18	18	200
Toilet 121	87	20	-	-	+	-	-	-	-	-	=	-	x	0.8	-	-	70 PER FIX	170	200
Toilet 122	87	20	-	-	+	-	-	-	-	-	=	-	x	0.8	-	-	70 PER FIX	170	200

No.	REVISION/SUBMISSION	DATE	
Mechanical/Electrical/Plumbing Engineer			
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ARCHITECTURE PLANNING INTERIORS			
PROJECT			
ROMBOUT FIRE DISTRICT - STATION 2 NYS ROUTE 52, FISHKILL, NY			
DRAWING			
MECHANICAL: EQUIPMENT SCHEDULES			
SEAL	DRAWN BY RL/KC CHECKED BY JT/GH DRAWING NUMBER	PROJECT NUMBER 10142 DATE 11-30-22	
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